



University of Warmia and Mazury in Olsztyn
Collegium Medicum, School of Medicine

Classes Rules and Regulations of Physiology Course for 2nd year Medical Students,

1. Course Description This course provides second year medical students with the basic facts and principles of Human Physiology. The Medical Physiology Course is a course which provides an understanding how cells, tissues, organs, and organ systems function together to create one organism. Our aim also is to train you to solve physiology and related clinical problems by applying physiologic principles. These principles are necessary to understand the mechanisms of disease, as well as treatments for pathological conditions. This course is designed to provide students with an understanding of the unique role of each organ and organ system in maintaining health and homeostasis. **Course objectives:** Competent Knowledge Skills: To acquire a core scientific knowledge about humans as a physiological entity. Clinical Skills: To apply basic physiology principles in the appropriate clinical context; To acquire a list of clinical skills at the introductory level. Non-technical Skills and Professional Behaviour: To incorporate physiology into the personal path of becoming a competent and caring physician; To be aware of physiological research to improve diagnoses and treatments of diseases.

1.1. Classes are carried out by Department of Human Physiology and Pathophysiology

1.2. Employees responsible for the implementation of the subject:

a. Head of the Department; Professor Mariusz Majewski, Ph.D, (Lectures)

b. Course Coordinator; Associate Professor Agnieszka Skowronska Ph.D phone: (89) 524-53-34, mail: agnieszka.skowronska@uwm.edu.pl (Blood and Immune System, Cardiovascular Physiology: Circuitry of the cardiovascular system, hemodynamic, regulation of arterial pressure, ECG, Respiratory Physiology).





c. Persons responsible for the implementation of Physiology

Associate Professor Agnieszka Bossowska Ph.D agnieszka.bossowska@uwm.edu.pl (Smooth muscle physiology, Cardiovascular Physiology: Cardiac electrophysiology, temperature regulation and microcirculation, Gastrointestinal Physiology).

Ewa Lepiarczyk Ph.D ewa.lepiarczyk@uwm.edu.pl (Neurophysiology, Autonomic Nervous System, Sensory Physiology, Skeletal muscle, Exercise Physiology)

Associate Professor Marta Majewska Ph.D marta.majewska@uwm.edu.pl (Renal Physiology, Reproductive Physiology).

Required textbooks:

Guyton and Hall “Medical Physiology” Twelfth Edition 13th or 14th Edition, 2020/2021, Elsevier
Linda S. Costanzo Physiology, 5th or 6th Edition 2018, 2022.

Alternative texts are:

L.S. Costanzo. Physiology. Board Review Series. Lippincott Williams & Wilkins.

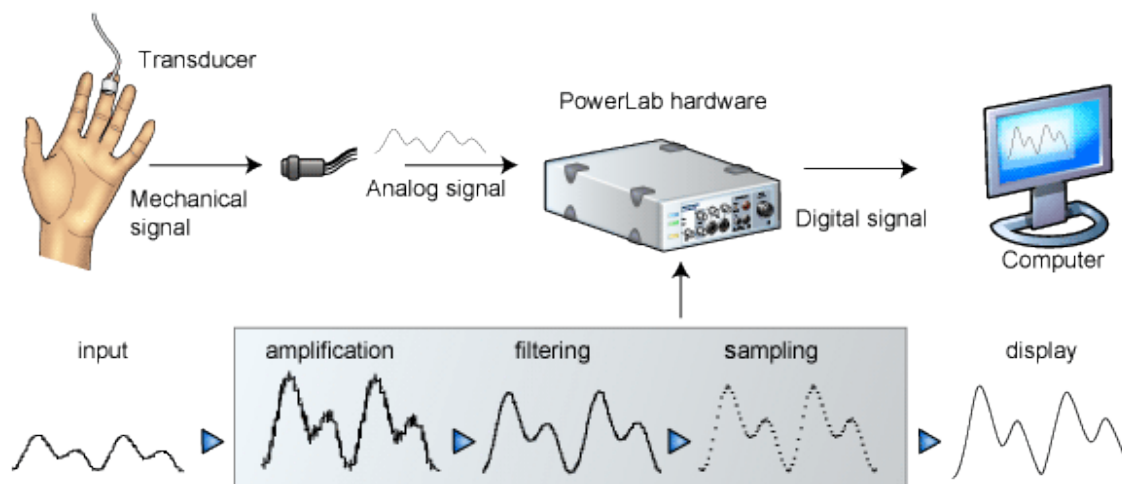
Walter F. Boron Emile L. Boulpaep Medical Physiology A Cellular and Molecular Approach, 2nd Edition. Berne & Levy Physiology , sixth Edition , Updated Edition.

Guyton and Hall “Physiology Review” 2021, Elsevier, Health Sciences Division.

1.3. Place and time as well as subjects of classes and credits are specified in documents: classes schedule, Syllabus, schedule, subject of classes. These documents are available on the website of the Department of Human Physiology and Pathophysiology

2. The Laboratories, seminars: Lab Work performance is assessed on a weekly basis so that students get practice in researching, analysing and application of the information learned in the course. Groups will be determined by your group in lab (10 students to each group).





In the Laboratory Program, students in small groups are participating in labs where they do experiments on human subjects under the guidance of their tutor. Our students are gaining solid knowledge of human physiology on which later their clinical training can build. Our non-invasive setups LabTutor is an HTML-based software package with ADInstruments' PowerLab designed specifically for laboratory teaching of Physiology.

During the course, 11 laboratories and 3 seminars are planned in the winter semester, and 13 laboratories and 5 seminars in the summer semester. Laboratories (room 12 and room 13) and seminars (Behring Center or CSM)

Students prepare seminars in groups of 3-4 persons. Seminars are held in the form of Problem Based Learning (PBL) with clinical case scenario to solve by each group. In small group discussion, the learner is expected to actively and productively participate, to further the group's performance and learning. Performance will be assessed by observation by faculty and peers.

3. Rules for student participation in Lab classes and seminars. A lab coat should be worn during laboratory experiments together with student`s code and closed toe shoe. You will be responsible for cleaning up your bench before you leave the lab.

4. Class attendance, justification and making up for the absence.

4.1. Lab attendance is mandatory. Lectures and seminars are mandatory.

4.2. All absences must be excused. The student is excused in the following cases: (disease certified by a medical doctor, justification from the year Supervisor). The note should be delivered no later





than three days from the end of the sick leave to the Secretary of the Department .

4.3. The student is obliged to report an absence to the person conducting **lab classes/seminars/colloquium**. If it is not done before the colloquium the student has not the right to their first attempt. Lab retake is not provided. Make-up colloquiums may be given to those students who, for extenuating reasons, cannot take colloquium at the appointed time. A note from physician is required if you miss the colloquium for reason of illness. Student is expected to arrange make-up colloquium in a timely manner (need to be taken within a maximum of 3 days) after the time of the original colloquium. Failure to do so will result in a fail grade of being posted for that colloquium.

4.4. Only 2 absences from classes, colloquiums, seminars and lectures per semester are allowed. Each subsequent absence qualifies the student to be removed from the course. In exceptional random cases (e.g. longer stay in hospital, longer illness), absences from classes, colloquiums, seminars and lectures justified by one sick leave will be treated as one absence. In other random cases, the possibility of completing a course in a given semester will be agreed individually with the course Coordinator.

4.5. In case of absence from classes, seminars, colloquium and exam without justification the student has not the right to their first attempt of colloquium/exam and will not get credit.

5. Rules for passing

5.1. Lectures: your presence will be checked. 100 % attendance is required during the whole year (two terms). Otherwise you will have to pass the material from the lecture, or if you were absent you must prepare the written report. The material carried out during the lectures is included in the final exam.

5.2. The Laboratories: your Laboratory Grade will be based on: your presence in class for the whole term in order to receive credit for the assignment. Written communication skills will be evaluated with the help of the laboratory reports. On each report, lab values need to be documented. Laboratory reports for each lab will be picked up in the end of the class and graded, (fail or pass). To obtain a credit from the report, you must obtain a minimum of 60% correct answers. You must understand topics covered early in the course and be prepared for the class. There will be weekly quizzes (5 very short question, each 1 point). These will serve as a record of your attendance and as a chance for you to test your current knowledge. We will start each Lab classes with a quiz.





Laboratory quizzes for each lab will be graded (fail <3 points, or pass 3/5, 4/5, 5/5 points). **It is allowed to fail only 1 quiz from a given system. If you fail more than one weekly quizzes or laboratory reports you have not the right to the first attempt of colloquium.**

Information regarding the material for the quizzes is sent one week in advance by mail from the teacher. Distribution of course materials i.e. hand-outs, case studies, power point presentation etc., will be given by each tutor class.

BE ON TIME, NO LATE QUIZZES WILL BE GIVEN! NOTE!! IF YOU WILL BE LATE FOR THE LABORATORIES (10 MINUTES) YOU WILL LOSE THE CHANCE TO WRITE QUIZZES AND RECEIVE A FAILING GRADE.

5.3. The colloquium: During the course 3 colloquiums are planned in the winter semester, and 4 in the summer semester. All colloquiums must be taken in order to receive credit for the course. ALL COLLOQUIUMS MUST BE TAKEN DURING THE SCHEDULED TIME, unless due to extenuating circumstances (see points 4.1-4.6). Dates of colloquiums (1st attempt) will be provided in the schedule. The person conducting the classes in a given topics is responsible for the colloquium (see the detailed course schedule), and is obliged to provide the information about the material for the colloquium at least 2 weeks before the date of the colloquium. **Colloquium will be held stationary and will be in writing form.** Each colloquium will consist of 4 open/descriptive questions. Open questions will be assessed on a scale of 0-5 points for the answer to a given question. The maximum number of points a student can receive at the colloquium is **20.0 points. (100%).** The minimum number of points needed to pass the colloquium is **12.0 points. (60%).** Duration of the colloquium is 1,5 hour (90 minutes). THE AVERAGE OF ALL GRADES FROM THE COLLOQUIA WILL BE THE SEMESTER PASSING GRADE (ZAL) in the USOSweb system. Colloquiums results will be release approximately within 2 weeks.





Form of receiving credit in a subject: *:

Criteria	Points	Grade
93-100%	18,75- 20	5 (very good)
85-92%	17,25-18,5	4,5 (more than good)
77-84%	15,75-17	4 (good)
69-76%	13,75-15,5	3,5 (rather good)
60-68%	12-13,5	3 (satisfactory)
< 60%	< 12	2 (failed)

**Your grade will be determined by your own achievement. There is no curve.*

Student has the right to three colloquiums (**1st attempt, retake and 2nd retake**). The first attempt (dates) of all colloquiums will be scheduled. Retake will be schedule within one week since you received the results of first attempt. **The annual settlement allows you to have a chance for 2nd retake at the end of the course . This means that if you do not pass the retake from given system in the winter semester, does not eliminate the student from the physiology course. The 2nd retake will be held in the end of the course, in June.**

REMEMBER: The 2nd retake is the closing date for the colloquium.

However, a student who did not pass the retake, and reports justified objections as to the impartiality of the assessment or the method of crediting, has the right to apply in the writing form to the Head of the Department for the 2nd retake in the form of a commission oral colloquium. The application is submitted within 3 days from the announcement of the results of the retake. The Head of the Department may order a commission colloquium for the Student. Student may appeal to the Dean if he/she does not agree with the decision of the Head of the Department. Credit is given before a committee composed of: Head of the Department as chairman, tutor of the year, two specialists in a given subject and a representative of the Student Year. The academic teacher who issued the grade verified by the committee procedure does not participate in the colloquium.





STUDENT IS OBLIGED TO PASS EVERY COLLOQUIUM FROM THE GIVEN SYSTEM. IF THE STUDENT WOULD NOT PASS THE COLLOQUIUM, HE/SHE DOES NOT COMPLETE A COURSE.

5.4. The Seminars: In the winter semester there are 3 seminars and in the summer semester 5. Students prepare seminars in groups of 3-4 persons. Seminars are held in the form of Problem Based Learning (PBL) with clinical case scenario to solve by each group. In small group discussion, the learner is expected to actively and productively participate, to further the group's performance and learning. Performance will be assessed by observation by faculty and peers. If the student will not pass the seminar, he does not have a right to resit. Passing grades: ZAL. Failing grade: NZAL. If a student receives an average below <3.0 (NZAL), at the end of the term he/she is obliged to have an oral exam concerning all seminar topics.

6. Final Exam

We will organize the (NBME) Physiology, Exam from National Board of Medical Examiners for all Students. We will inform about the exam in spring semester.

THE CONDITION FOR TAKING THE FINAL EXAM IS PASSING THE ALL COLLOQUIUMS, SEMINARS AND ATTENDING THE LECTURES.

The Final Exam will be **in written - 1st attempt, Retake form and oral - 2nd Retake**. The written form of the exam consisting 10 open questions, (duration of the final exam is 3h [180 minutes]). Students who obtained a grade of at least good plus (4,5) in both semesters and participate in lectures are eligible for exemption from the final examination.

Students who obtained a grade of at least good (4,0) in both semesters and participate in lectures are eligible to take the “zero” term exam. The final list of Students is approved by the Head of the department and Course Coordinator.

Student has the right to take the Final Exam 3 times ONLY (1st attempt, Retake, 2nd Retake).

A student who did not pass the Retake and reports justified objections as to the impartiality of the assessment or the method of crediting, has the right to submit an application to the Head





of the Department for a **2nd Retake in the form of a commission exam.**

A request should be submitted within 3 days from the announcement of the Retake results. The Head of the Department may order a commission exam (2nd Retake). The Student has the right to appeal to the Dean against the decision of the Head of the Department.

Credit (2nd Retake) is given in front of a Committee: the Dean, Head of the Department, tutor of the year, two specialists in a given subject and a representative of the Student. A teacher whose grade is questioned by the student does not take part in the commission examination (2nd Retake).

Rules for grading the Final Exam (1st attempt, Retake):

The maximum number of points a student can receive at the Final Exam is 50.0 points. (100%). The minimum number of points needed to pass the Final Exam is 30.0 points. (60%). Duration of the colloquium is 1 hour (60 minutes).

Percentage	Number of points	Grade
93-100%	46,25-50	5,0 (more than good)
85-92%	42,25-46	4,5 (very good)
77-84%	38,25-42	4,0 (good)
69-76%	34,25-38	3,5 (rather good)
60-68%	30-34	3,0 (satisfactory)
60%	< 30	2,0 (failed)

Rules for grading the Final Exam (2nd Retake):

The oral exam consists of 3 questions from different systems. The student must answer all 3 questions, each question should be answered with a minimum of > 60%.

7. Academic Honesty: It is expected that all students help to maintain an environment of academic honesty. If I suspect you are cheating on an exam I will report you to the Dean. The following behaviours are strictly forbidden during the administration of the exam: cell phone use (or any electronic devices, including spy glasses with ear phones), passing of papers or notes. All backpacks, coats, etc. are to be placed in the front of room.





8. **Unregulated issues in the presented regulations of classes** remain in the responsibility of the Head of the Department / Course Coordinator
9. **The regulations of classes are in accordance with the regulations of UWM studies and the procedures in force at the School of Medicine.**
10. **The student is obliged to read the health and safety rules (BHP).**

