



*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, (Lectures)

b. Course Coordinator; Associate Professor Agnieszka Skowronska Associate Professor phone: (89) 524-57-56 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 Associate Professor agnieszka.bossowska@uwm.edu.pl
(Smooth muscle physiology, Cardiovascular Physiology: Cardiac electrophysiology, temperature





regulation and microcirculation, Gastrointestinal Physiology).

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

Associate Professor Marta Majewska Associate Professor 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 (lab classes/ seminars/colloquium). 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** beata.gwiazda@uwm.edu.pl

If it is not done before the colloquium the student has not the right to their 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.

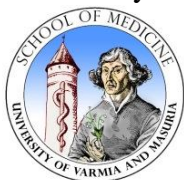
4.4. Only 2 absences from classes, colloquiums, seminars and lectures per semester are allowed.

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:

Grade will be based on your presence in class:

a) there will be weekly quizzes: an assessment of the student's theoretical preparation for each current exercise: 5 short descriptive questions, **a student may obtain 1 point for each correct answer.** The assessment is based on the pass-fail system. A student passes the test if a minimum of 3 points is obtained. **Failure to pass an weekly quizzes will result in a deduction of one point (-1) from the student's total points.** Information on the scope of the material obligatory for a given exercise will be made available at the latest one week before the date of the exercise by e-mail or on the Department of Human Physiology and Pathophysiology website.

b) written communication skills will be evaluated with the help of the **laboratory report.** 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) the evaluation of the exercise report, which the student submits for examination to the exercise instructor after completing the exercise.. A minimum of 60% of correct answers is required to obtain a pass mark. **Failure to pass the report will result in a deduction of one point (-1) from the student's total course credit.**

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.** unless due to extenuating circumstances (see points 4.1-4.6). Dates of colloquiums 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.

a) **Colloquium will be held stationary and will be in writing form.** Each colloquium will consist of 6 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 on the colloquium is 30 points. (100%). The minimum number of points needed to pass the**





colloquium is 18 pts. (60%).

THE SUM OF POINTS OBTAINED FROM ALL THE COLLOQUIA WILL CONSTITUTE THE FINAL GRADE FOR THE COURSE!

b) A minimum of 126 credits from all the colloquia during the whole course student must obtain.

IF A STUDENT DOES NOT OBTAIN THE MINIMUM NUMBER OF POINTS (126), HE/SHE WILL NOT RECEIVE CREDIT FOR THE COURSE.

c) There is only one colloquium from the given system (e.g. Neurophysiology, Blood, Cardiovascular Physiology, Kidney Physiology). Colloquiums results will be release approximately within 2 weeks.

Form of receiving credit in a subject: *:

Criteria	Points	Grade
93-100%	195,210	5,0 (very good)
85-92%	178-195	4,5 (more than good)
77-84%	160,5-177,5	4,0 (good)
69-76%	143-160	3,5 (rather good)
60-68%	126-142,5	3,0 (satisfactory)
< 60%	< 126	2,0 (failed)

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

d) A student is only entitled to take a colloquium 1 time. The date for all colloquia in a given semester will be agreed with the Head of Year at the beginning of the semester.

e) If a student obtains an insufficient number of points (<126), he/she will be allowed to take the final test at the end of the academic year (summer semester). The final test will be held in a written form consisting of 7 open questions (one from the each system). **In order to pass the course with a satisfactory grade (3,0) a student must obtain at least 21 points.**





f) Students who do not obtain at least 126 points in a subject and who raise justified objections concerning the impartiality of the assessment or the way in which the course was passed may apply to the Head of the Department for a final assessment colloquium. The request must be submitted to the Department Secretariat no later than one week before the scheduled date of the final assessment colloquium. The Head of Department may order a student to undergo a oral colloquium. The decision of the Head of Department may be appealed to the Dean. The credit is taken before a committee consisting of: Head of Department as chair of the committee, the year supervisor, two specialists in the subject in question and a representative of the Student Government. In the case of an excused absence (sick leave - at least 3 days, exemption from the year supervisor), the student does not lose the date of the colloquium at which he/she was absent if the abovementioned documents

g) Unexcused absence at the Colloquium means a failing grade (2.0) for the respective Colloquium term.

h) In exceptional cases (e.g. prolonged hospitalisation), the dates for the completion of the Colloquia may be arranged individually with the instructor of the respective Subject Colloquium.

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

The Final Exam will be in written - 1st attempt, Retake oral 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).

