Department of Human Physiology and Pathophysiology

Course Regulations for the subject 'Physiology'

for students of the School of Medicine, Collegium Medicum,

University of Warmia and Mazury in Olsztyn

1. General information

1.1 The course is delivered by the Department of Human Physiology and Pathophysiology.

1.2 Staff responsible for delivering the course:

a. **Head of Department: Prof. Mariusz Majewski, PhD**

b. Course Coordinator: Agnieszka Skowrońska, MD, PhD, Professor at the University of Warmia and Mazury, agnieszka.skowronska@uwm.edu.pl , (+48) 89 524 57 56; Ewa Lepiarczyk, MD, PhD, Professor at the University of Warmia and Mazury, ewa.lepiarczyk@uwm.edu.pl , (+48) 89 524 56 83

c. Persons responsible for delivering the various types of classes according to the timetable:

LECTURES

- Prof. Mariusz Majewski, PhD
- Łukasz Jaśkiewicz, MD, PhD in Health Sciences

SEMINARS

- Prof. Mariusz Majewski,
- Ewa Lepiarczyk
- Agnieszka Bossowska
- Marta Majewska

PRACTICAL CLASSES

- Agnieszka Bossowska, , PhD, Professor at the University of Warmia and Mazury (UWM)
- Ewa Lepiarczyk, PhD, Professor at the University of Warmia and Mazury (UWM)
- Anna Kozłowska, PhD, Professor at the University of Warmia and Mazury (UWM)
- Marta Majewska, PhD Professor at the University of Warmia and Mazury (UWM)
- Agnieszka Skowrońska, PhD Professor at the University of Warmia and Mazury (UWM)
- Edyta Juranek, PhD Professor at the University of Warmia and Mazury (UWM)
- Bernard Kordas MVD

1.3 The time and subject matter of individual classes and assessments are set out in the following documents: the study plan, the syllabus, the timetable and the course outline, which are available on the website of the Department of Human Physiology and Pathophysiology.

1.4 In the event of an epidemic threat, classes may be conducted in whole or in part

using ICT via the MS Teams and Moodle platforms or others approved by the University.

2. Teaching activities take the form of compulsory:

a. lectures,

b. practical sessions (laboratory exercises, study of physiological mechanisms based on clinical cases in groups of 10),

c. seminars (study of physiological mechanisms in groups of 20–30).

3. Rules governing student participation in individual types of classes.

a. The following are prohibited: the use of electronic devices enabling remote communication

and other audio-visual equipment; recording, filming or taking photographs

during teaching sessions.

b. During teaching sessions, students are responsible for any property entrusted to them.

c. Students must follow the instructions of the session leader.

d. It is prohibited to consume food or drink during teaching sessions.

e. Clean footwear must be worn in practical classrooms; changing shoes upon entering

from outside is compulsory.

f. Students are required to prepare for classes using the prescribed textbooks

and to participate actively in practical sessions and seminars.

4. Attendance at classes, procedures for justifying absences and making up for missed sessions

4.1 Attendance at all types of classes is compulsory.

4.2 All absences must be justified.

4.3 Only two absences in total are permitted across practical sessions, tests, seminars and lectures during the semester. Any further absence will result in the student being removed from the attendance register for the ‘Physiology’ course. In exceptional unforeseen circumstances

(e.g. a prolonged hospital stay, a prolonged illness), absences from practical sessions, tests, seminars and lectures justified by a single medical certificate will be treated as a single absence.

In other unforeseen circumstances, the possibility of passing the course in the given semester will be determined on a case-by-case basis with the course coordinator.

4.4 Proof of absence (sick note, excuse from the year tutor, dean's leave) must be presented without delay to the person leading the class, assessment or examination, **no later than 7 working days** after the reason for the absence has ceased.

4.5 Any unexcused absence from lectures, seminars or practical sessions constitutes grounds for the Student's removal from the 'Physiology' course.

4.6 The procedure for justifying absences from specific types of classes (including assessments and examinations) is in accordance with the procedure setting out the rules for justifying absences from teaching sessions, examinations and assessments at the Faculty of Medicine – Resolution No. 157/2018 of the Council of the Faculty of Medicine, Collegium Medicum, University of Warmia and Mazury in Olsztyn, dated 12 April 2018. An absence may be excused on the basis of:

a. illness certified by a doctor's note,

b. a document signed by the year tutor,

c. in exceptional cases, by members of the Dean's Council, confirming family or personal circumstances, e.g. an unforeseen incident, participation in a competition or a scientific conference.

4.7 Procedure for making up for absences from classes:

a. Absence from a lecture must be justified. Students who miss a lecture will be required to write an additional report summarising the lecture's content. Failure to pass the report will result in failure of the lectures and exclusion from the examination.

b. Absences from practical sessions and seminars must be justified and made up with another group; where this is not possible, an oral or written assessment must be undertaken with the lecturer in charge of the session.

c. An excused absence from a test or examination entitles the student to sit the test or examination at a later date, as determined by the coordinator or examiner,

5. Rules for passing individual course components:

5.1 Lectures

a. The topics covered in the lectures form part of the subject matter of the respective laboratory sessions, tests and the 'Physiology' examination.

5.2 Laboratory classes

a. Classes will be held in groups of 10; students will be divided into teams of two. The composition of the teams remains fixed throughout the 'Physiology' course. Practical laboratory exercises using the 'flipped classroom' method: Think-Pair-Share. Use of advanced simulation and computer programmes for the study of physiology.

b. Analysis of physiological mechanisms based on two clinical cases, which students will work on in groups of five. Each group will receive a patient history and physical examination findings, along with additional diagnostic test results. During the class, students will be expected to explain the physiological mechanisms underlying the regulation of the respective processes.

c. The topics covered in each practical class are available on the website of the Department of Human Physiology and Pathophysiology.

d. The person responsible for assessing and approving the completion of the laboratory classes is: Agnieszka Skowrońska, MD, PhD, Professor at the University of Warmia and Mazury.

e. **Assessment of the practical classes is based on:**

• the total number of points from the 'short test' (5 short descriptive questions, set in each class and marked on a scale of 2–5); marks from the short tests are converted into points as follows:

Mark	**Points**
5 (very good)	**5 points**
4,5 (good+)	4,5 points
4 (very good)	4 points
3,5 (good+)	3,5 points
3 (good)	3 points
2 (satisfactory)	**0 points**

FINAL GRADE – short tests

Points	**Grade**
110-103,5	**5**
103,49-96,5	4,5
96,49-90,5	4
90,49-83,5	3,5
83,49-77	3
<77	**2,0**

- **marks from the final assessment – mini-OSCE (4 stations)**, each station is marked on a scale of 0 – 5 points.

FINAL ASSESSMENT – mini-OSCE

Points	**Grade**
20-18,5	**5**
18,49-17,5	4,5
17,49-16,5	4
16,49-15,5	3,5
15,49-14	3
<14	**2**

f. **Marks obtained from 'entry short tests' cannot be revised.**

FINAL ASSESSMENT – PRACTICAL EXERCISES

Points	Grade
5,0-4,5	**5**
4,49-4,25	4,5
4,24-4,00	4
3,99-3,75	3,5
3,74-3,50	3
<3,50	**2**

g. The final mark for the practical classes is the weighted **average of the marks for the 'short tests' (60%) and the marks for the mini-OSCEs (40%)** taken during the practical classes, in accordance with the table shown above.

h. Students who do not achieve 77 marks in the entrance 'short tests' or 14 marks in the mini-OSCE are entitled to sit the final assessment, known as the '**additional credit** ', covering the entire course material during the last week of the academic year. The assessment takes the form of a true-false test comprising 140 statements (20 from each subject area). Students pass with a pass mark (3.0) if they achieve 70 per cent correct answers - 70 marks. Agnieszka Skowrońska, PhD, Associate Professor is responsible for the '**additional credit**'.

i. A student who has failed the practical classes and raises justified objections regarding the impartiality of the assessment or the method of assessment is entitled to submit a request to the Head of Department for a committee review of their knowledge. The request must be submitted within 3 days of the announcement of the course assessment results. The Head of Department may order a panel assessment of the student's knowledge. An appeal against the Head of Department's decision may be lodged with the Dean.

j. The assessment takes place before a panel comprising: the Head of Department as chair of the panel, the year tutor, two subject specialists and a representative of the Student Union. The academic staff member who awarded the mark being reviewed by the panel does not take part in the panel's assessment of the student's knowledge.

k. The mark awarded following a panel assessment replaces the verified mark.

5.3 Seminars

a. A study of the mechanisms and regulation of specific physiological systems in groups of 20 - 30 students.

b. Students prepare five topics in the form of presentations in groups of 4–6; the composition of the groups remains fixed throughout the year. Each presentation lasts a maximum of 20 minutes, during which each member of the group has 4–5 minutes to discuss their assigned material within the group. Seven minutes are set aside for discussion, during which each of the other groups must ask the presenters one question each, with an additional question from the lecturer.

c. Students' work is assessed on a pass/fail basis.

d. A group may receive a 'fail' in the following circumstances: work that does not correspond to the topic, or a lack of substantive preparation on the part of any member of the group presenting the topic in question.

e. If a group receives a 'fail' mark, **the entire presenting group will have 20 points deducted from their total pool of marks from the tests**.

f. The topics discussed at individual seminars will be available on the website of the Department of Human Physiology and Pathophysiology.

g. Passing the seminar will be based on the number of marks obtained in the tests held during the semester.

h. The person responsible for assessing the seminar is Ewa Lepiarczyk, PhD, Professor at the University of Warmia and Mazury (UWM)

i. Colloquium:

i. The following individuals are responsible for the academic preparation of the individual tests:

a.**C1** Cell and blood physiology Agnieszka Skowrońska, PhD, Associate Professor

b.**C2** Neurophysiology Dr Ewa Lepiarczyk, PhD, Associate Professor

c.**C3** Physiology of Muscles and the Endocrine System Ewa Lepiarczyk, PhD, Associate Professor

d.**C4** Physiology of the circulatory system Agnieszka Bossowska, PhD, Associate Professor

e.**C5** Physiology of the respiratory system and physical exertion. Anna Kozłowska, PhD, Associate Professor

f.**C6** Physiology of the gastrointestinal tract and metabolism Agnieszka Bossowska, PhD, Associate Professor

g.**C7** Physiology of the excretory and reproductive systems Marta Majewska, PhD, Associate Professor

During the semester, colloquiums are scheduled to assess students' knowledge of a specific range of topics. They cover the seminar and laboratory class material and may also include lecture material.

ii. The topics covered by each test are available on the website of the Department of Human Physiology and Pathophysiology.

iii. **Each of the 7 colloquiums (C1, C2, C3, C4, C5, C6, C7) is in the form of a multiple-choice test consisting of 70 questions, each with 5 possible answers, of which only 1 is correct.**

iv. For students who are absent with an excused absence, an additional test date will be scheduled within 5–14 days of the date on which the results of the respective test are announced.

v. **An unexcused absence from a test is equivalent to receiving 0 points for that test.**

vi. **Colloquiums cannot be retaken or improved.**

j. **The final grade for the seminar is based on the total number of points obtained from all colloquiums, according to the table below:**

FINAL GRADE – SEMINAR

Points	Grade
490-461	**5 (bdb)**
460-432	4,5 (db+)
431-401	4 (db)
401-373	3,5 (dst+)
372-343	3 (dst)
<343	**2 (ndst)**

k. A student who does not obtain **343 points** is entitled to take the final assessment, the so-called '**additional credit**' covering all the material included in all tests. The assessment will take place during the last week of the academic year. It takes the form of a multiple-choice test consisting of **70 questions**, each with **5 possible answers**, of which only **1 is correct**. The student passes the assessment with a **satisfactory grade (3.0)** upon achieving **70% correct answers (49 points)**. The '**additional credit**' is coordinated by **Agnieszka Skowrońska, PhD, Associate Professor.**

l. A student who has not passed the seminar and has justified concerns regarding the impartiality of the assessment or the manner in which the assessment was conducted has the right to submit a request to the **Head of the Department** for a **committee-based verification of their knowledge**. The request must be submitted within **3 days** of the announcement of the assessment results. The Head of the Department may order a committee-based verification of the student's knowledge. The student has the right to appeal the decision of the Head of the Department to the **Dean**.

m. The assessment is conducted before a committee consisting of the Head of the Department, who serves as the chair of the committee; the year coordinator; two specialists in the relevant subject area; and a representative of the Student Government. The academic teacher who issued the grade being reviewed through the committee-based procedure does not participate in the committee-based verification of knowledge.

n. The grade obtained through the committee-based verification of knowledge **replaces the grade being reviewed**.

6. Final Examination

6.1 The course **"Physiology"** concludes with a **written and oral examination** covering the lecture, seminar, and laboratory class material.

6.2 Conditions for admission to the examination:

a. A prerequisite for taking the examination is the completion of all compulsory classes:

- lectures,
- laboratory classes,

- seminars.

b. The person responsible for conducting the examination is **Dr hab. Agnieszka Skowrońska, UWM Professor – Course Coordinator**.

c. The persons responsible for preparing the examination are:

- **First examination date:** Professor Mariusz Majewski Agnieszka Skowrońska, MD, PhD, UWM Professor,
- **Second examination date (first retake):** Ewa Lepiarczyk, MD, PhD, UWM Professor,
- **Third examination date (second retake):** Professor Mariusz Majewski Agnieszka Skowrońska, MD, PhD, UWM Professor.

Examination on the "zero" date:

- The "zero" examination is available to students who have obtained a **grade higher than good (4.5)** in the seminar, have passed the laboratory classes, and have attended the lectures.
- The examination is conducted **orally and consists of 3 questions**. The student must answer each question at a level corresponding to at least a **satisfactory grade (60%)** in order to pass the examination.
- The final list of students eligible to take the "zero" examination is approved by the **Head of the Department and the Course Coordinators**.

e. **Exemption from the examination** is granted to students who have obtained a **very good grade (5.0)** in the seminar, have passed the laboratory classes, and have attended the lectures.

The final list of students eligible for exemption is approved by the **Head of the Department and the Course Coordinators**.

f**. There are three examination dates:**

- First examination date,
- Second examination date (first retake),
- Third examination date (second retake).

These dates fall respectively during the summer examination session (first date) and the summer retake examination session (second and third dates).

g. The date and place of the examination will be announced no later than **14 days before the end of the summer semester of the 2026/2027 academic year**.

h. The written examination is in the form of a **single-best-answer multiple-choice test**. The test consists of **120 questions**, each with **5 possible answers**, of which only **1 is correct**.

FINAL EXAMINATION – WRITTEN TEST

Percentage of points obtained	**Points**	**Grade**
91,5-100%	110-120	**5 (very good)**
83,5-91,4%	101-109	4,5 (good plus)
75,5-83,4%	91-100	4 (db)
67,5-75,4%	81-90	3,5 (satisfactory plus)
60-67,4%	72-80	3 (satisfactory)
<60%	<72	**2 (unsatisfactory)**

i. The oral examination consists of 3 questions. The student **must answer each question at a level corresponding to at least a satisfactory grade (60%)**. The final grade is the average of the grades obtained for the individual questions.

QUESTION GRADE – ORAL EXAMINATION

Average grade for the questions*	**Grade**
91,5-100%	**5 (very good)**
83,5-91,4%	4,5 (good plus)
75,5-83,4%	4 (db)
67,5-75,4%	3,5 (satisfactory plus)
60-67,4%	3 (satisfactory)
<60%	**2 (unsatisfactory)**

FINAL EXAMINATION GRADE – ORAL EXAMINATION

Average grade for the questions*	**Grade**
4,6-5,0	**5 (very good)**
4,2-4,59	4,5 (good plus)
3,8-4,19	4 (db)
3,4-3,79	3,5 (satisfactory plus)
3,0-3,39	3 (satisfactory)
<3,0	**2 (unsatisfactory)**

j. **A student who obtains at least a good grade (4.0) on the written test is exempt from the oral part of the examination and receives the grade obtained on the test as the final examination grade.**

k. The final examination grade is the average of the grades obtained in the written and oral parts of the examination:

FINAL EXAMINATION GRADE

Average grade from the written test and oral examination	**Grade**
4,6-5,0	**5 (very good)**
4,2-4,59	4,5 (good plus)
3,8-4,19	4 (db)
3,4-3,79	3,5 (satisfactory plus)
3,0-3,39	3 (satisfactory)
<3,0	**2 (unsatisfactory)**

l. Students must have a valid identity document with them during the examination (an identity card or student ID card).

m. In the event of obtaining an unsatisfactory grade in the first examination date, the student has the right to take two resit examinations: the second examination date (first resit) and the third examination date (second resit). **A student who does not pass the written test does not proceed to the oral part of the examination.** The student may take the oral part only after passing the written test. **If a student passes the written test but fails the oral part, they are required to take only the oral part of the examination at the subsequent examination date.**

n. At the student's request, submitted within **3 days** of the date of the first resit examination (second examination date), in which the student raises substantial concerns regarding the impartiality of the assessment or the conduct of the examination, the second resit examination (third examination date) is conducted as a committee examination.

o. To conduct a committee examination, the Dean appoints a committee consisting of:

i. the Dean (in exceptional cases, an academic teacher authorized by the Dean), as the chair of the committee,

ii. two specialists in the subject covered by the examination or in a related specialization,

iii. the year coordinator,

iv. a representative of the Student Government.

p. The academic teacher who issued the grade being reviewed through the committee procedure does not participate in the committee examination.

q. The committee examination may be conducted in **oral or written form**. If the written form is used, the committee examination consists of a committee-based assessment of the examination paper.

r. The committee examination may be considered passed if at least two-thirds of the student's answers to the individual questions are assessed as satisfactory or higher.

s. An examination report is prepared and kept in the student's personal academic records.

t. The result of the committee examination is **final**.

u. Obtaining a **passing grade in the examination** is a prerequisite for passing the course.

7. REVIEW OF TESTS AND EXAMINATION

7.1 Students have the right to review their marked answer sheets from tests and the examination. The answer sheets may be reviewed by students on one designated date specified by the Course Coordinator.

7.2 Students may submit objections/comments regarding questions included in the tests and examination questions using the forms prepared by the Department, immediately after the test or examination. Any doubts or objections will be reviewed and resolved by two specialists.

8. ACADEMIC INTEGRITY AND HONESTY

Students are required to comply with the principles of academic integrity and honesty *(e.g. cheating, copying during tests, examinations, or providing information to other students)*. In the event of a violation of these principles, students will be held accountable in accordance with the nature and seriousness of the violation.

During tests and examinations, if the instructor observes that a student is cheating or providing information to other students, all students violating the principle of independent completion of tests or examinations **will receive an unsatisfactory grade (2.0)** for the respective test or examination.

In serious cases of academic misconduct, the student should expect the involvement of the Dean or the Disciplinary Committee for Students of the University of Warmia and Mazury in Olsztyn.

9. MATTERS NOT COVERED BY THESE REGULATIONS

Matters not regulated in these regulations governing the course “Physiology” conducted by the Department of Human Physiology and Pathophysiology shall be decided by the Course Coordinators, and in their absence, by the Head of the Department of Human Physiology and Pathophysiology.

10. These course regulations comply with the Regulations of Studies of the University of Warmia and Mazury in Olsztyn (UWM) and the procedures applicable at the Faculty of Medicine.

11. Students are required to familiarize themselves with the occupational health and safety (OHS) regulations applicable in the location where the classes are conducted.

12. Before classes, students are required to familiarize themselves with the location of the fire extinguisher in the Department of Human Physiology and Pathophysiology and the first-aid kit in the teaching room. During classes, students are required to comply with the OHS regulations applicable in teaching facilities.

Agnieszka Skowrońska, PhD, Professor at the UWM — *prof. Mariusz Majewski*

Ewa Lepiarczyk, PhD, Professor at the UWM — Head of the Department