

MEDICAL PHYSIOLOGY STUDY AND EXAM REQUIREMENTS FOR MEDICAL STUDENTS (2025-2026 1st semester)

Medical Physiology is taught in two courses: the mandatory Medical Physiology I. and II. course comprising of lectures and laboratory practice sessions, and the compulsory elective Medical Physiology Seminar I. and II. courses comprising of a group and a whole class (joined) seminar sessions each week.

The students can change groups only with the permission and cooperation of the Foreign Students' Secretariat and the change must be registered in the Neptun. The students will be evaluated on the end semester exam (Medical Physiology I.), the comprehensive exam (Medical Physiology II), and by seminar grades (Medical Physiology Seminar I. and II.).

The detailed study material that is the basis for all evaluations is contained in the Learning Objectives made available for the students, the material is comprehensively discussed in the lectures, seminars and laboratory practice sessions. Recommended textbooks include: Guyton and Hall: Textbook of Medical Physiology, Ganong's Review of Medical Physiology, Linda S Costanzo: Physiology, but other sources may also be used that assist in learning the material included in the Learning Objectives.

Lectures

This semester the lectures are planned to be held on campus, however, a pandemic situation may necessitate online lectures. Attendance of the lectures is recommended, however, attendance of the lectures will not be checked. The slides of the lectures will be shared through Coospace and the departmental website as well.

Laboratory practices

Attending the laboratory practice classes is compulsory. Students showing negligence during the semester concerning visiting the laboratory practice (more than 3 missed practical sessions) will not receive a signature, the semester will not be accepted and they will not be permitted to take the end semester exam. The practice sessions (labs) will begin on time. In case of late arrival (that is shorter than 10 minutes), the student can perform the laboratory but the practical teacher can only give a "satisfactory" but not a "good" grade to the tardy student. Late arrival that is longer than 10 minutes (>10 min) is considered as an absence and the student is not allowed to perform the practice. There is going to be a week in the practical schedule allowing to make up for ONE absence in the practical session for every student.

Except for the first and last week of the semester, the two groups sharing the same timepoint in the schedule will complete the practicals with different, alternating programs. The groups with even numbers (Groups 2, 4, 6, etc) in the even numbered weeks of the semester, the groups with odd numbers (Groups 1, 3, 5, etc) in the odd numbered weeks of the semester will perform altogether 6 laboratory practices while the other group will have an on-line practice through the Coospace platform (6 online practices), that must be filled in and submitted online. The laboratory practice sessions require individual or collective work. The schedule of the practical sessions can be found on the webpage of the Department. Students are expected to come prepared to the practical sessions. At the beginning of the practical sessions teachers may check the preparedness of the students. Students must complete a report concerning the laboratory work; these reports will be evaluated on a three-scale grade (not acceptable – satisfactory – good) by the practical teacher. Receiving a satisfactory or good evaluation is necessary for the acceptance of the attendance as well. Simultaneously, the practical teacher will award 1 (satisfactory) or 2 (good) exam points that will contribute to the result of the end semester exam (ESE), maximum 12 points, see details at the description of the ESE. with the accepted checked and signed (accepted) by the practical leader at the end of the session.

In case of the online practice, successful completion of the online practice is necessary for the acceptance of the attendance.

Seminars

The group seminars and the joined seminar class are going to be held on campus. Attending the group seminars is compulsory, attending the joined seminars is recommended but attendance is not checked similar to the lectures. Students showing negligence during the semester concerning visiting the seminars (more than 3 missed group seminars) or not fulfilling the requirements will receive a failed (1) grade that will result in the loss of credits as well. The seminars begin on time, late arrival (>10 min) is also considered as an absence.

The weekly seminars are intended to discuss the topics presented in the lectures. The students are expected to be prepared and be active participants in the seminars with good background knowledge of the topics involved. The student performance on the seminar course will be evaluated on a 5-grade scale, the basis of this evaluation will be the performance on the TWO demonstrations, and any further written or oral examinations of the semester. Demonstrations will take place in the indicated study weeks in the time frame of the group

seminar, and the seminar teachers will examine the students based on the learning objectives of the indicated study material and evaluate them on a 5-grade scale. For successful completion of the course (gaining credits and a minimum passed (2) grade), the student MUST pass BOTH demonstrations with at least passed (2) grades. Being absent on the demonstration also counts as a failed demonstration. ONE failed (1) demonstration can be repeated on the last week of the semester with the group seminar teacher. In case a student fails both demonstrations during the semester, or fails the repeated demonstration, the seminar credit points may be earned only by passing a single-occasion supervised seminar demonstration from the material of the failed demonstration(s) in front of an exam committee in the first week of the exam period.

Multiple choice question (MCQ) tests during the semester

In connection to the Medical Physiology 1 course, on the 5th, 10th and 14th week– in a time to be determined later considering the students' timetable and lecture room availability, there will be 1-1 MCQ tests (23 MCQs, 25 min, 23 points each test). From the three tests, the rounded average of the best two test results will yield maximum 23 points that contribute to the result of the ESE (see details at ESE description). The MCQ tests are NOT compulsory, in case of absence they cannot be repeated. The study material of the MCQs along with sample tests will be announced on Coospace.

ESE Exam information

Warning!: Students caught cheating during the written or the oral exams will be immediately excluded from the exam. The teachers will file a formal report on the misconduct of the student and initiate a disciplinary action. There are three possibilities to complete (pass) the ESE: 1. with the mid-term tests only (ESE exemption), 2. written MCQ test in the exam period, 3. oral exam in the exam period. The maximum score of the exams is 80 points that determines the grades the following way:

Grades

0-40 points = failed (1)

41-50 points = passed (2)

51-60 points = accepted (3)

61-70 points = good (4)

71-80 points = excellent (5)

ESE exemption

The Department of Physiology provides an opportunity to complete the ESE solely based on the performance of the mid-term MCQ tests and the laboratory practices. The exemption grade can be accepted (3), good (4), and excellent. The requirements of receiving an exemption ESE grade are the following: 1. write all three MCQ tests, 2. earn minimum 10 points (out of 23 points) on EACH of the 3 MCQ tests, and 3. earn at least 51 points on the 5 tests. The Department of Physiology maintains its right to cancel the exemption program if student compliance with the rules during the lectures or the tests becomes unacceptable, or if due to the pandemic situation full online teaching must resume. The exempted grades will be automatically offered in the NEPTUN system, that will be converted to an ESE exam grade if the student accepts it. In the absence, or in case of refusal of the exempted grade, the student may take the ESE as follows.

Written ESE

The first ESE exam is a written MCQ test (45 MCQs, 55 min, 45 points), that will be summated with the exam points obtained on the MCQs (maximum 23 points) and the laboratory practices (maximum 12 points) to yield maximum 80 points. The written exams will start on the date and at the location specified in Neptun system.

Oral ESE

All repeated and the grade-improving exams ESEs are oral exams. The oral exams may also yield maximum 45 points. The oral exams also start on the date and at the location (if necessary in the online space) specified in the Neptun system.

The oral exam will have two parts, attended by two examiners. First, there is an entry exam in which 2 learning objectives and 3 normal values are asked from the learning objectives and normal values marked as “essential knowledge”. Not being able to answer any of these questions will result in a failed exam immediately. In the second part, three topics will be chosen either with topic cards or random number generators. In case of an in-person exam, sufficient time can be provided for the preparation of the selected topics. However, in case of an on-line exam, after minimal (1 min) preparation time, the student starts the exam, however, the examiners will guide the exam with questions. During the examination, the examiners may show images or ask to draw some graphs in accordance with the learning objectives. At the end of the response the examiners evaluate the performance on a 5-grade scale (excellent – 15 points, good – 12 points, accepted – 9 points, passed – 6 points), if the

grade is failed the exam is finished with a failed result, otherwise the exam continues with the next topic. At the end of the exam the sum of all points (oral exam points, MCQ points, and practice points) will yield the exam grade.

The students taking the third exam in the semester (2nd repeated exam) or the last chance (6th) exam will select topic regardless the result of the entry exam.

On the oral exams, the passed (2) grade will be granted, if acceptable knowledge in all three oral topics were demonstrated.

If someone desires to improve his/her mark, the faculty rules concerning “improving the result of a successful exam” apply.

Students who registered on the Neptun but did not show up on the exam, can justify their absence in order to get back the lost exam chance IF 1) they were admitted to a hospital as an inpatient on the day of the exam or 2) after the closure of the Neptun exam administration of the respective exam date developed an acute medical condition requiring immediate health care, or 3) due to a technical problem the online exam could not be attended. The documentation from the health care providers should be submitted for inspection (in person or attached to an email) to the departmental educational advisor not later than in the first case 10 calendar days workdays after released from the hospital or in the second/third case 10 calendar days after the missed exam date.

Comprehensive exam (CE) exam course

The CE is an oral exam starting on the date and at the location (if necessary in the online space) specified in the Neptun. In case of an online exam, technical details of the online exam will be provided through Coospace.

The oral exam will have two parts, attended by two examiners. First, there is an entry exam in which 2 learning objectives and 3 normal values are asked from the learning objectives and normal values marked as “essential knowledge”. Not being able to answer any of these questions will result in a failed exam immediately. In the second part, three topics will be chosen either with topic cards or random number generators. In case of an in-person exam, sufficient time can be provided for the preparation of the selected topics. However, in case of an on-line exam, after minimal (1 min) preparation time, the student starts the exam, however, the examiners will guide the exam with questions. During the examination, the examiners may show images or ask to draw some graphs in accordance with the learning objectives. At the end of the response the examiners evaluate the performance on a 5-grade

scale (excellent – 15 points, good – 12 points, accepted – 9 points, passed – 6 points), if the grade is failed the exam is finished with a failed result, otherwise the exam continues with the next topic. The students taking the third exam in the semester (2nd repeated exam) or the last chance (6th) exam will select topic regardless the result of the entry exam.

On the comprehensive exams, the passed (2) grade will be granted, if acceptable knowledge in all three oral topics were demonstrated. The points earned on the exam will be added to the points earned in the active semester of the course, and the sum of all points will yield the exam grade the following way:

Grades

-50 points = passed (2)

51-58 points = accepted (3)

59-66 points = good (4)

67-80 points = excellent (5)

If someone desires to improve his/her mark, the faculty rules concerning “improving the result of a successful exam” apply.

Students who registered on the Neptun but did not show up on the exam, can justify their absence in order to get back the lost exam chance IF 1) they were admitted to a hospital as an inpatient on the day of the exam or 2) after the closure of the Neptun exam administration of the respective exam date developed an acute medical condition requiring immediate health care, or 3) due to a technical problem the online exam could not be attended. The documentation from the health care providers should be submitted for inspection (in person or attached to an email) to the departmental educational advisor not later than in the first case 10 calendar days workdays after released from the hospital or in the second/third case 10 calendar days after the missed exam date.

Szeged, September 9, 2025.

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