

PHYS 106 FINAL EXAMINATION: Monday, 20-June-2022, 09:30-11:30

Please check your exam place in the course's Search Database that has its link at:

<http://www.physics.metu.edu.tr/genphys/>

There may be last moment changes in the Search Database. So, check it again before you go to your exam place.

The Board of Instructors decided to include the complete course content in the final exam.

The exam papers with the solutions will be scanned for grading with the Grade Scope software. The solutions are graded by the instructors not by the software.

**VERY IMPORTANT WARNING:** It is required that you must write your Full Name and Student ID inside the boxes provided at the top of Pages 1, 3 and 5 of the exam. You are obliged to write with NEAT and READABLE characters. Do not use colored pencil or pen. Otherwise the Grade Scope software will not recognize and match your name with the course's roster list.

**REQUIREMENTS:** (1) METU STUDENT ID CARD OR STUDENT CERTIFICATE WITH STAMPED PHOTO AND BIRTH CERTIFICATE OR PASSPORT. OTHERWISE YOUR EXAM WILL NOT BE PROCESSED AND YOU WILL BE GIVEN A ZERO GRADE.

BE AT YOUR EXAM ROOM AT LEAST 10 MINUTES EARLIER.

LEARN YOUR CORRECT EXAM ROOM AND NEVER CHANGE IT. NEVER ENTER THE EXAM IN A DIFFERENT ROOM. OTHERWISE YOU WILL BE TREATED AS IF YOU TRY TO CHEAT AND YOU WILL BE GIVEN A ZERO GRADE.

BRING PEN, PENCIL, ERASER, STUDENT ID CARD.

IT IS BETTER IF YOU DO NOT BRING YOUR PHONE IN THE EXAM ROOM. OTHERWISE IT MUST BE TURNED OFF AND KEPT IN A CLOSED PLACE. YOUR EXAM WILL NOT BE PROCESSED AND YOU WILL BE GIVEN A ZERO GRADE IF YOU TOUCH YOUR PHONE DURING THE EXAM.

YOU ARE NOT PERMITTED TO HAVE BOOKS, NOTES, CALCULATORS, BACKPACKS, PURSES OR OTHER STUFF ON THE TABLE AND SEAT NEXT TO YOU OR ON THE FLOOR AT YOUR FEET DURING THE EXAM.

If you do not have your Student ID Card due to any reason, then apply to the Directorate of Student Affairs (Registrar's Office) and get your card before the examination.

At least a week is required to get a new Student ID card, but a Student Certificate with a stamped photo is given immediately. If you lost your Student ID card and has no sufficient time to get a new ID card apply to the Directorate of Student Affairs (Registrar's Office) with your photo and ask for a Student Certificate with the stamped photo. Bring this certificate and your birth certificate (nüfus cüzdanı) or passport with you to enter the exam.

The rules and regulations of the exam are:

01. This examination has computational (solving) type 5 problems. Solve all of them.
02. Check the exam. If there is any missing page, missing problem, or printing error, inform the proctor immediately.
03. If you think that a problem is wrong, do not spend time. Skip it and continue, and see the coordinator after the exam.
04. DO NOT ASK ANY QUESTION (INCLUDING EXPLANATION OF WORDS) TO THE PROCTOR DURING THE EXAMINATION; read, understand and solve. If this rule is violated, inform the course coordinator after the exam.
05. There might be corrections during the exam. Listen carefully and do the corrections on the exam paper.
06. If a problem has quantities given with their symbols like  $x$ ,  $F$ ,  $m$ ,  $a$ ,  $v$ ,  $L$ ,  $r$ ,  $\mu$ , ... etc. with no numerical values, then express all your answers in terms of some or all of the given quantities and appropriate constants as needed.
07. The grading of a problems is based on what you actually write down. You should provide drawings (figures) of the situation you are considering, explain the method you are following, and state clearly the physical principles you are applying.
08. Write all steps in answering a problem in the space provided under each problem. If the solution steps are not shown, no credits will be given. Write clearly all formulas you use. SI units must be given for all numerical answers. Draw a box around your answer to make it clearly visible.
09. YOU ARE NOT PERMITTED TO HAVE PHONE, BOOKS, NOTES, SCRATCH PAPERS, CALCULATORS, BACKPACKS, PURSES OR OTHER STUFF ON THE TABLE AND SEAT NEXT TO YOU OR ON THE FLOOR AT YOUR FEET DURING THE EXAM. TOUCHING THE PHONE DURING THE EXAMINATION IS STRICTLY FORBIDDEN. OTHERWISE THE PHONE AND THE EXAM PAPER ARE TAKEN AND THE STUDENT IS REQUIRED TO LEAVE THE EXAM ROOM IMMEDIATELY, AND IS GIVEN ZERO FOR THAT EXAM.
10. Students may not leave the exam room during the first 20 minutes. Any student who comes late more than 20 minutes may not take the exam. No extra time is given to the student who comes late during the first 20 minutes.
11. By keeping the exam papers folded at all times, keep your solutions very carefully away from other eyes around. Otherwise another student may look at your solution and copy it. If that happens, then you will also be questioned.