

Course: Physics 255: University Physics I, SH 3107, MTWHF 11:30-12:55

Pre-requires: Calculus I (Math 136)

Co-requires: Calculus II (Math 137) and University Physics I Lab (Phys 256)

Instructor: Dr. Jason Boyles

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Office Hours: Monday-Thursday 10:30-11:20, Other times are available by appointment.

Office: SKyTeach 110

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Required Materials: Matter and Interactions, 4th ed through Persuall, the expertTA homework system, Glowscript, and Learning Catalytics

Grades: Persuall reading 8%, In-class activities 20%, Homework 12%, Exam I-IV 11% each, Final Exam 16%

A 100%-90%, B 89%-80%, C 79%-70%, D 69%-60%, F < 59%

Persuall reading: Daily reading assignment will be due through the Persuall reading system. You will be required to post comments and questions, minimum ten, during your reading, which will be graded by Persuall. Each reading assignment will be graded on a score out of two, with three being the maximum points possible for each reading assignment. If you are taking both Phys 255 and Phys 265, purchase the lifetime access/3650 days and use the link in blackboard to register.

In-class assignments: Attendance is expected and consistent with WKU policy, you are responsible for the content of each class. In-class activities will be done either through learning catalytics, glowscript, or on paper. These activities could include think-pair-share, atif, computational, or individual questions. The access code is **HSSLCV-GRILL-FLORY-SPRUE-LOBBY-ROUSE** for learning catalytics, and you will be billed through WKU's Day one access program. Point distribution: 1/2 Glowscript, 1/2 Learning Catalytics

Homework: Homework will be due 24-48 hours after each chapter is completed. It will be completed through the expertTA system at <https://www.theexpertta.com/> and the registration link is **<http://goeta.link/USH19KY-4F51C1-1TY>**. Please register using your topper email and use the registration link to enter this course. There is a fee of 32.50 U.S. dollars. You are encouraged to work together on homework, but you must complete your own unique work. There is a 5% penalty for late homework plus a 1% deduction per hour late. Help with the homework can be found at the Physics Help Center, EST 134, at various hours during the week. Homework grade formula: $\text{HWG} = \text{int}\left(\frac{(\text{Expertta}+3)}{8}\right)$ out of 12%

Glowscript: The vpython environment glowscript can be found at <http://www.glowscript.org/>, and is free to use. We will be using this program through the semester for computational projects. All programs will be graded on a one point scale, with non-executable programs receiving a score of zero.

Exams: Exams will be given during class time. You are permitted to use a writing utensil and a non-programmable calculator without a back during the exam. No cell phones, PDAs, iPads, smart watches, or any other devices or objects that may allow you an unfair advantage will be permitted while taking the exam. All exam material must be visible at all times and remain at or above desk level. Failure to comply with the exam rules will result in a score of zero for that exam. Exams will consist of some multiple choice questions and some problems with multiple parts. There will be no exemption from the final. If you need to miss an exam due to an emergency, please let me know immediately about your situation. Make-up exams are given on a per case basis.

Class Environment: Western Kentucky University and I are committed to social justice. This class is expected to have a positive learning atmosphere based upon open communication, mutual respect, and non-discrimination. Any suggestions as to how to further such an environment will be appreciated and be given serious consideration.

Students with disabilities: In compliance with university policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the student accessibility resource center (SARC) in Downing Student Union, 1074. The phone number is 270-745-5004. Please do not request accommodation directly from the professor or instructor without a letter of accommodation from the SARC.

Title IX: Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKUs Title IX Sexual Misconduct/Assault Policy (0.2070) at <https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf> and Discrimination and Harassment Policy (0.2040) at https://wku.edu/policies/hr_policies/2040_discrimination_harassment_policy.pdf. Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

Learning Outcomes:

Apply scientific principles to interpret, analyze, and make predictions.

Explain the basic concepts and principles of motion on macroscopic and microscopic scales.

Use computer modeling and approximations to model and predict real world phenomena.

Learn critical thinking and problems solving skills that are useful in all areas of study.

Report having a positive learning experience in the course.

Dates	Material Covered	Class Notes
5/13 - 5/17	1.1-1.11,2.1-2.7	Exam I 5/23
5/20 - 5/24	3.1-3.16,4.1-4.5	
5/27 - 5/31	4.6-4.11,5.1-5.10	
6/3 - 6/7	6.1-6.17	Exam II 6/4
6/10- 6/14	7.1-7.11,8.1-8.7,10.1-10.5	Exam III 6/13
6/17 - 6/21	10.6-10.11,9.1-9.2, 11.1-11.11	Exam IV 6/21
6/24 - 6/28	12.1-12.4,s1.1-s1.8	Final Exam 6/28