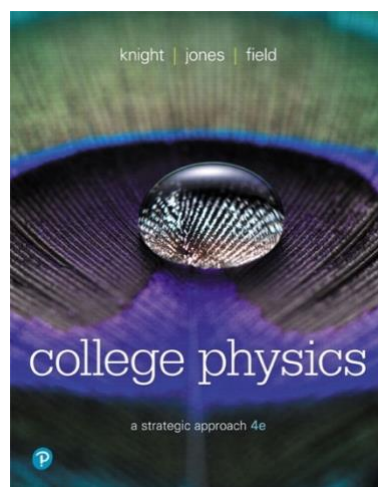




INSTRUCTOR: NJ Getson	TEXT ME: 501.548.4468	EMAIL: njgetson@uca.edu
OFFICE HOURS: Mon–Fri	TIME: 08:00–09:00AM	LINK: Zoom Link in BBoard
COURSE WEB: http://faculty.uca.edu/njaustin/PHYS1420		
LECTURE: Asynchronous	LECTURE VIDEOS: On BBoard	VIDEOS: Also on YouTube
RECITATION: Tue / Thu	TIME: 09:00–10:00AM	LINK: Zoom Link in BBoard
LAB SIMS: Open/flexible	DUE DATES: Tuesday and Thursday of each week	
EXAMS: Every Friday	TIME: Live at 12:00 (noon)	DUE: 12:00 (noon) Sunday
TEXTBOOK: <i>College Physics</i> , Knight/Jones/Field, 4 th ed. <i>Mastering Physics</i> access code required!		ISBN: 978-0136781189
COURSE NECESSITIES: Scientific calculator; reliable internet connection; an internet-capable device with access to Blackboard, Pivot Interactives, and UCA Google Suite		

PHYS 1420: College Physics II

OBJECTIVES: The purpose of this course is to provide an overview and in-depth understanding of waves (matter, sound, and light), physical and geometric optics, and electricity and magnetism. You will also exercise and improve your critical thinking and problem-solving skills by participating in discussions and laboratory activities.

LECTURE: Lectures will be asynchronous. Videos are located on BBoard, in the Media Library, or the Online Classroom. You can also access the video library via YouTube. It's an unlisted playlist, and it is not visible to searches, so you must use the link provided. You should manage your time to view the appropriate videos each week before you are required to complete a lab or take an exam over the material. I have also compiled a selection of supplemental YouTube videos that will be helpful (but which do not replace the actual course lectures).

RECITATION: Recitations are scheduled for each Tuesday and Thursday. I have scheduled a recurring Zoom Meeting and will be live during these hours each week. Recitation time focuses on active problem solving to prepare for each week's exam. Recitations will be recorded and uploaded to BBoard.

A *Mastering Physics* assignment that correlates with each recitation is posted on Blackboard. You should attend recitation to ask specific questions about homework problems and get help in real-time. Each 20-point assignment includes a 5-point Adaptive Follow-Up. If you score at or above 95% on the assignment, you will 'test out' and automatically receive the five follow-up points. Due to time constraints, the final two assignments do not include a Follow-Up.

There are twelve assignments, one per chapter. Ten will count toward your grade. You must have the *Mastering Physics* access code to access the assignments. There is no paper handout with an alternative assignment.

LABORATORY: There are ten experiments scheduled for the semester. We are using [Pivot Interactives](#), and you will be given a seat assignment (basically, your login to the system) on the first day of the course. **This is not**

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something you need to purchase! The labs are all online simulations, but they will require you to make realistic measurements. These are best worked on a computer or tablet. A phone screen is nowhere near large enough to see what you need to measure or read the instruments.

You may choose when to complete the lab sims as long as you submit your work prior to the due dates. All ten sims will count toward your grade, and there is no make-up.

All of the information for each lab is fully contained within each sim. I have posted PDF documents for review, but these are not in a format that you can submit for credit. You must submit your lab work via the Pivot form (no exceptions) to get credit.

EXAMS: Five unit exams are scheduled over the semester. Each exam will cover the chapters listed on the course calendar for the week. There is no comprehensive final exam. You should expect exams that are approximately 40% conceptual or qualitative problems and 60% quantitative. Exams will go live every Friday at 12:00 PM (noon). You should plan to spend about 60–75 minutes completing each test, but you will have until Sunday at 12:00 PM (noon) to submit your work.

This extended deadline is intended *only* to provide a buffer against technical difficulties. Extensions will not be forthcoming without clear and unambiguous documentation of the technical issue, which prevented the submission of the exam and evidence that you made a good-faith effort to contact me and solve the problem in advance of the due date. Please do not wait until 11:58 on Sunday morning to sit down and take a crack at the test.

EXAM 01	15 July 2022	Chapters 14 and 15
EXAM 02	22 July 2022	Chapters 16 and 17
EXAM 03	29 July 2022	Chapters 18 and 19
EXAM 04	05 August 2022	Chapters 20–22
EXAM 05	12 August 2022	Chapters 23–25

POINTS AND GRADES: You are expected to keep all graded material and keep track of your point progress over the course of the semester. I will be happy to correct any bookkeeping mistakes, but you must document the error with the original graded work. Please be patient; assignments that automatically post grades to Blackboard may not always update as instantaneously as one would hope. Please wait before panicking if you do not instantly see a homework score in your grade book.

The point distribution for the semester is shown below.

LAB SIMS	10 sims @ 30 points each	300	30%
HOMEWORK	10 sets @ 25 points each	250	25%
EXAMS	5 tests @ 90 points each	450	45%
TOTAL		1000	100%

Grades are not curved. Points are points regardless of how you earn them! Because there are (a generous number of) extra credit points built into the Lab Sims, these point thresholds are fixed and firm.

GRADE	A	B	C	D	F
MINIMUM	885	795	695	599	0
MAXIMUM	1000	884	794	694	598

ATTENDANCE AND TIME MANAGEMENT: Live attendance of recitation and/or office hours is not required. However, you are undoubtedly aware that the more engaged you are, the better your outcomes will be.

It's also for *my* benefit; these are the only times I will have to get acquainted with you and observe how you are processing the material. The more I know about your (as a group) progress, the better I can fine-tune your tests. I don't want to prepare a test thinking, "Oh, everybody's gonna do great on this one!"—and then we both get a nasty surprise. I'd like to minimize the disconnect and maximize your return on the investment of your time.

Time management is your responsibility, and you must be responsible for meeting all deadlines. Make-up work is not available. But if circumstances conspire and you miss a deadline, what then?

- **Did you forget a homework assignment?** Don't panic. There are 12, and only ten count for your grade. No harm/no foul. Take a deep breath and keep moving forward.
- **Did you miss a lab deadline?** If this is the first time, you get a free pass, no questions asked. Everyone gets one (and only one) freebie. You must notify me within 12 hours of the missed due date to be granted a 24-hour extension.
- **Did you miss a lab due date again??** Unless you can document your compelling circumstances, there will be no extension. If you notify me within 12 hours of the missed due date and document your predicament, I will extend a 24-hour grace period.
- **Did you not submit an exam?** Because you already have a 48-hour window to complete all exams, you will be required to meet a steep burden of proof before

receiving any extension. Please know that I do understand that \$^*# inevitably happens at the most inconvenient time—but when it does, it invariably leaves some sort of corroborating evidence in its wake. Please expect to provide it.

Any abuse of this policy (i.e., providing false information) will result in, at the minimum, a course grade of F and referral to the Dean of Students for further disciplinary action.

ACADEMIC INTEGRITY: The University of Central Arkansas affirms its commitment to academic integrity and expects all members of the university community to accept shared responsibility for maintaining academic integrity. Students in this course are subject to the provisions of the university's Academic Integrity Policy, approved by the Board of Trustees as [Board Policy No. 709](#) on February 10, 2010, and published in the Student Handbook. Penalties for academic misconduct in this course may include a failing grade on an assignment, a failing grade in the class, or any other course-related sanction the instructor determines to be appropriate. Continued enrollment in this course affirms a student's acceptance of this university policy.

It is also a matter of academic and personal integrity to take responsibility for withdrawing yourself from this course if the situation requires it. The last day for unrestricted withdrawal with a W is Thursday, 04 August 2022.

Collaboration is actively encouraged in recitation and lab (seriously, help each other out!). However, the work you submit must be your own. Any collaboration on exams is strictly prohibited and will result in, at the minimum, a course grade of F and referral to the Dean of Students for further disciplinary action.

STUDENT EVALUATIONS: Student evaluations of a course and its professor are crucial in helping faculty achieve excellence in the classroom and the institution in demonstrating that students are gaining knowledge. Students may evaluate classes they are taking starting on the Monday of the fourth week of instruction through the end of finals week by [logging in to myUCA](#) and clicking on the Evals button on the top right.

AMERICANS WITH DISABILITIES ACT: UCA adheres to the requirements of the Americans with Disabilities Act. If you need an accommodation under this act due to a disability, please contact the [UCA Disability Resource Center](#) at 501.450.3135.

TITLE IX DISCLOSURE: If a student discloses an act of sexual harassment, discrimination, assault, or other sexual misconduct to a faculty member (as it relates to "student-on-student" or "employee-on-student"), the faculty member cannot maintain complete confidentiality and is required to report the act and may be required to reveal the names of the parties involved. Any allegations made by a student may or may not trigger an investigation. Each situation differs, and the obligation to

investigate will depend on those specific sets of circumstances. The Title IX Coordinator will determine whether to conduct an investigation. For further information, please visit: <http://uca.edu/titleix>

*Disclosure of sexual misconduct by a third party who is not a student and/or employee is also required if the misconduct occurs when the third party is a participant in a university-sponsored program, event, or activity.

Course Calendar

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DATE	LECTURE	LAB / RECITATION	DUE
11 JUL: MONDAY	Chapter 14.1–14.4	Lab 01: Simple Harmonic Motion	
12 JUL: TUESDAY	Chapter 14.5–14.7	Recitation 01: HW 01 / Ch 14	11:59 PM: Lab 01
13 JUL: WEDNESDAY	Chapter 15.1–15.2	Lab 02: Speed of Sound	11:59 PM: HW 01
14 JUL: THURSDAY	Chapter 15.3–15.4	Recitation 02: HW 02 / Ch 15	11:59 PM: Lab 02
15 JUL: FRIDAY	Chapter 15.5–15.7	Exam 01: Chapters 14–15	11:59 PM: HW 02
17 JUL: SUNDAY	DUE: Exam 01: Chapters 14 and 15		12:00 PM CDT (noon)
18 JUL: MONDAY	Chapter 16.1–16.3	Lab 03: Standing Waves on a String	
19 JUL: TUESDAY	Chapter 16.4–16.7	Recitation 03: HW 03 / Ch 16	11:59 PM: Lab 03
20 JUL: WEDNESDAY	Chapter 17.1–17.2	Lab 04: Light Diffraction	11:59 PM: HW 03
21 JUL: THURSDAY	Chapter 17.3–17.4	Recitation 04: HW 04 / Ch 17	11:59 PM: Lab 04
22 JUL: FRIDAY	Chapter 17.5–17.6	Exam 02: Chapters 16–17	11:59 PM: HW 04
24 JUL: SUNDAY	DUE: Exam 02: Chapters 16 and 17		12:00 PM CDT (noon)
25 JUL: MONDAY	Chapter 18.1–2, 18.6	Lab 05: Reflection and Refraction	
26 JUL: TUESDAY	Chapter 18.3, 18.5–18.7	Recitation 05: HW 05 / Ch 18	11:59 PM: Lab 05
27 JUL: WEDNESDAY	Chapter 19.1–19.2	Lab 06: Geometric Optics	11:59 PM: HW 05
28 JUL: THURSDAY	Chapter 19.3–19.5	Recitation 06: HW 06 / Ch 19	11:59 PM: Lab 06
29 JUL: FRIDAY	Chapter 19.6–19.7	Exam 03: Chapters 18–19	11:59 PM: HW 06
31 JULY: SUNDAY	DUE: Exam 03: Chapters 18 and 19		12:00 PM CDT (noon)
01 AUG: MONDAY	Chapter 20.1–20.4	Lab 07: Coulomb's Law	
02 AUG: TUESDAY	Chapter 20.5–21.1	Recitation 07: HW 07 / Ch 20	11:59 PM: Lab 07
03 AUG: WEDNESDAY	Chapter 21.2–21.5	Lab 08: Resistance and Resistivity	11:59 PM: HW 07
04 AUG: THURSDAY	Chapter 21.7–22.2	Recitation 08: HW 08 / Ch 21 HW 09 / Ch 22	11:59 PM: Lab 08
05 AUG: FRIDAY	Chapter 22.3–22.6	Exam 04: Chapters 20–22	11:59 PM: HW 08 11:59 PM: HW 09
07 AUG: SUNDAY	DUE: Exam 04: Chapters 20–22		12:00 PM CDT (noon)
08 AUG: MONDAY	Chapter 23.1–23.5	Lab 09: Ohm's Law	
09 AUG: TUESDAY	Chapter 23.6–24.3	Recitation 09: HW 10 / Ch 23	11:59 PM: Lab 09
10 AUG: WEDNESDAY	Chapter 24.4–24.6	Lab 10: Faraday's Law	11:59 PM: HW 10
11 AUG: THURSDAY	Chapter 24.7–25.2	Recitation 10: HW 11 / Ch 24 HW 12 / Ch 25	11:59 PM: Lab 10
12 AUG: FRIDAY	Chapter 25.3–25.7	Exam 05: Chapters 23–25	11:59 PM: HW 11 11:59 PM: HW 12
13 AUG: SATURDAY	DUE: Exam 05: Chapters 23–25		6:00 PM CDT

DISCLAIMER: Assignments, point distributions, grading scales, due dates, and course policies should be regarded as flexible and subject to substitution or change at the instructor's discretion. Students should refer to the 2021–2022 Student Handbook and familiarize themselves with all policies, particularly the Sexual Harassment Policy and Academic Policies.