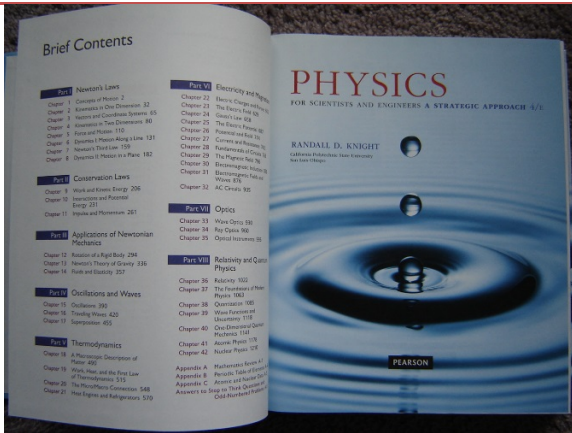


The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Course Description: Principles of Physics for Scientists and Engineers-Mechanics, Waves, Thermodynamics	
Athena Title:	Prin of Physics for Scie Engr
Pre or Corequisite:	MATH 2250 or MATH 2250E or MATH 2300H or MATH 2400 or MATH 2400H
Grading System:	A-F (Traditional)
Instructor:	Dr. Andrei Galiautdinov
Sections:	30232 12:45pm – 02:00pm (T, Th; Rm. 221) 25698 02:20pm – 03:35pm (T, Th; Rm. 202 Auditorium)
Office:	Rm. 220 (at Physics)
Office hours:	TBD later
Method of instruction:	In-class lecture
Preferred method of communication:	During regular class times
Emailing Policy:	Before emailing, please make sure you read and understood this syllabus in its entirety. ag1@uga.edu
Text:	<i>Physics for Scientists and Engineers, A Strategic Approach</i> Parts I, II, III, IV, 4th Edition, Randall D. Knight (Pearson Addison-Wesley) Mastering Physics will <u>not</u> be used, but you may find having access to it useful. 
Academic Honesty:	As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: www.uga.edu/honesty. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor. UGA Student Honor Code: "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." A Culture of Honesty, the University's policy and procedures for handling cases of suspected dishonesty, can be found at www.uga.edu/ovpi. Every course syllabus should include the instructor's expectations related to academic honesty.
Attendance policy:	➤ Strongly advised
Labs:	➤ Labs are completely independent of the Lectures ➤ All inquiries related to Labs should be directed to either your respective lab TAs, or our Lab Coordinator, Mr. Tom Barnello, at: tjbar@uga.edu or tjbar@physast.uga.edu 706-542-2903, Rm. 310
Lab syllabus:	➤ May be found here: http://www.physast.uga.edu/courses
Exams:	➤ There will be three (3) midterm exams on selected chapters, and one (1) cumulative final exam ➤ Have to be completed on scheduled days at scheduled times ➤ No make-ups or re-scheduling permitted
Exam format:	➤ Multiple-choice, to be completed ONLINE on the eLC (located under Tools → Quizzes) ➤ Access opens at 12:45pm on the days specified in the Schedule below ➤ Access ends at 4:15pm on same day ➤ Each Test will be split into 2 Parts (5 problems each, with a total of 10 problems per Test) ➤ Each Part will have time limit of 30 minutes (+ extra time for the DRC students)

- Two Attempts allowed (best attempt counts)
- Once Attempt started, must be completed within allotted time (30 minutes)
- Do NOT use smart phones, since those tend to crash (as some of you have reported); use a desk- or laptop instead
- Make sure to save each answer and to finish each Part before disconnecting/logging out
- **NOTE: your overall grade in this class will solely be based on Labs + a total of 40 exam problems**
- **IMPORTANT: The second attempt is a courtesy. It is offered as a means to mitigate against unexpected situations, such as power outages, etc., so do not ask for a 3rd attempt. Once the test has been configured on the eLC, no additional modifications will be done for any reason.**

NOTE: MASS FINAL EXAM WILL BE ACCESSIBLE AT THE TIME SLOTS LISTED ON REGISTRAR'S PAGE (Thursday, Dec. 09, 7-10pm):

<https://reg.uga.edu/general-information/calendars/final-exam-schedule/>

Grades:	Your grades will be posted on the eLC, http://elcnew.uga.edu
Grading policy:	20% LABS 20% EXAM 1 (Multiple-Choice (MC), no individual re-scheduling or make up) 20% EXAM 2 (MC, no individual re-scheduling or make up) 20% EXAM 3 (MC, no individual re-scheduling or make up) 20% EXAM 4 (cumulative MC mandatory Final Exam; no individual re-scheduling or make up) NOTE: Our departmental policy prohibits rescheduling of missed exams (regardless of the reason, be it a court appearance, immigration, medical, family, sporting, or any other type of emergency). The final exam will replace your worst midterm if it is better (say, if you got a zero for non-attendance, power outage, etc.). That replacement will not be visible on the eLC. Your overall grade will become available on Athena after the corresponding deadline. Email me only if you strongly believe there was a mistake in my calculation. Do not ask for a bump-up, a curve, or any extra credit. Make sure to include your class and section number. 100% TOTAL = 20% LABS + 80% EXAMS (including the Final)
Cut-offs:	F : [0, 60) D : [60, 68) C-: [68, 70) C: [70, 75) C+: [75, 78) B-: [78, 80) B: [80, 85) B+: [85, 88) A-: [88, 90) A: [90, 100] NOTE: No rounding; 89.99 = A-, etc.
Main objective and strategy for success:	In this course, mastering the art of problem solving should be regarded as your ultimate objective. I will not be able to cover everything you are expected to know in class. You will have to independently work through some of the topics at home. Since most of your grade will come from problem solving, do the following: 1. Start working from Day One. 2. Continue working hard and consistently on a daily basis throughout the semester. 3. Read assigned chapters before they are discussed in class. 4. Re-work the problems solved in class 5. Answer all end-of-chapter conceptual questions. 6. Solve all assigned end-of-chapter problems. Do this ahead of schedule, especially when preparing for Test 2 and final Test 4, as those tend to be most challenging for the majority of students. 7. Use the formula: "Five problems a day keep the bad grade away." 8. Ace the labs. 9. If everything fails, drop the class before withdrawal deadline and re-take it at a later time.
Grade appeal:	Grade appeals are resolved by following our departmental due procedure as described here: https://www.physast.uga.edu/policies/policiesonstudentissues/grievance

Incompletes:	No "Incompletes" will be assigned in this class unless requested by the UGA Office of Student Support Services.* <i>*You must remove the "I" by the end of the semester subsequent to its assignment.</i>
Hardship withdrawals:	If your course performance is significantly affected by issues beyond your control, please seek assistance promptly from the Office of Student Support Services http://sco.uga.edu/ . It is always easier to address exceptional circumstances when you raise these concerns as early as possible. Waiting until the end of the semester to take action may limit my ability to provide appropriate support.

2021 Fall Main Schedule					
Wk	Day	Date	Ch.	Topics	Practice problems (4th Ed)
1	M	Aug. 16			
	T	Aug. 17			
	W	Aug. 18			
	R	Aug. 19	1	<u>CONCEPTS OF MOTION</u> Secs. 1 – 7 (read at home) Sec. 8 Intro to this course 3 types of basic physical quantities Unit conversion; dimensional analysis Significant figures; scientific notation	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29
	F	Aug. 20			
	M	Aug. 23			
2	T	Aug. 24	2	<u>1D KINEMATICS</u> Secs. 1 – 3 (read at home) Secs. 4 – 7 Motion with constant acceleration Free fall Motion on an inclined plane Instantaneous acceleration	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35 Drop/Add ends
	W	Aug. 25			
	R	Aug. 26		(Cont.)	
	F	Aug. 27			
	M	Aug. 30			
	T	Aug. 31	3	<u>VECTORS</u> Secs. 1 – 4 Vectors and coordinate systems	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 43, 45
3	W	Sep. 01			
	R	Sep. 02			
	F	Sep. 03			
	M	Sep. 06			Labor Day
	T	Sep. 07	4	<u>2D KINEMATICS</u> Sec. 1 (read at home) Sec. 2 Projectile motion	1, 3, 5, 7, 9, 11, 13, 15, 17
	W	Sep. 08			
4	R	Sep. 09		(Cont.)	
	F	Sep. 10			
	M	Sep. 13			
	T	Sep. 14			EXAM 1

5	W	Sep. 15			
	R	Sep. 16		<u>NEWTON'S LAWS OF MOTION:</u>	
			5	Secs. 1 – 7	1 – 41 (odd numbered)
			6	Secs. 1 – 6	1 – 35 (odd numbered)
			7	Secs. 1 – 5	1 – 25 (odd numbered)
6			4	Sec. 5 (centripetal acceleration)	31, 33, 35
			8	Sec. 2 (centripetal force), 4 (various roller-coaster scenarios)	5, 7, 9, 11
	F	Sep. 17			
	M	Sep. 20			
	T	Sep. 21		(Cont.)	
7	W	Sep. 22			
	R	Sep. 23		(Cont.)	
	F	Sep. 24			
	M	Sep. 27			
	T	Sep. 28		(Cont.)	
8	W	Sep. 29			
	R	Sep. 30		(Cont.)	
	F	Oct. 01			
	M	Oct. 04			
	T	Oct. 05		(Cont.)	
9	W	Oct. 06			
	R	Oct. 07		(Cont.)	
	F	Oct. 08			
	M	Oct. 11			
	T	Oct. 12		<u>IMPULSE AND LINEAR MOMENTUM; COLLISIONS</u>	
10			11	Secs. 1 – 4	1 – 29 (odd numbered)
	W	Oct. 13			
	R	Oct. 14		(Cont.)	
	F	Oct. 15			
	M	Oct. 18			
11	T	Oct. 19		(Cont.)	
	W	Oct. 20			
	R	Oct. 21			EXAM 2
	F	Oct. 22			
	M	Oct. 25			Withdrawal deadline
12	T	Oct. 26		<u>WORK AND KINETIC ENERGY</u>	
			9	Secs. 1 – 4	1 – 29 (odd numbered)
	W	Oct. 27			
	R	Oct. 28		(Cont.)	
	F	Oct. 29			Fall Break
12	M	Nov. 01			
	T	Nov. 02		<u>POTENTIAL ENERGY; CONSERVATION OF ENERGY</u>	
			10	Secs. 1 – 5, 7, 8	1 – 29 (odd numbered), 35, 37, 39, 41, 43, 47, 49
	W	Nov. 03			
	R	Nov. 04		(Cont.)	

	F	Nov. 05			
	M	Nov. 08			
13	T	Nov. 09		(Cont.)	
	W	Nov. 10			
	R	Nov. 11	13	<u>NEWTON'S LAW OF GRAVITY</u> Secs. 1 – 6 (in class)	1 – 33 (odd numbered)
	F	Nov. 12			
14	M	Nov. 15			
	T	Nov. 16		(Cont.)	
	W	Nov. 17			
	R	Nov. 18		(Cont.)	
	F	Nov. 19			
15	M	Nov. 22			
	T	Nov. 23			EXAM 3
	W	Nov. 24			
	R	Nov. 25			Thanksgiving
	F	Nov. 26			
16	M	Nov. 29			
	T	Nov. 30	4	<u>ROTATIONAL KINEMATICS</u> Secs. 4, 5, 6 Uniform circular motion Angular position, Velocity, and Acceleration Non-uniform circular motion & angular acceleration Connection b/w linear & rotational quantities	23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43
	W	Dec. 01			
	R	Dec. 02	12	<u>ROTATIONAL DYNAMICS</u> Secs. 1, 3, 4, 5, 6, 7, 8, 9, 10, 11	1, 3, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45
	F	Dec. 03			
17	M	Dec. 06			
	T	Dec. 07		(Friday Schedule)	Classes End
	W	Dec. 08			Reading Day
	R	Dec. 09			FINAL MASS EXAM (mandatory, cumulative) Thur., Dec. 09 7:00 – 10:00 pm
	F	Dec. 10			
18	M	Dec. 13			
	T	Dec. 14			
	W	Dec. 15			
	R	Dec. 16			
	F	Dec. 17			Commencement
19	M	Dec. 20			Grades due (12:00 PM)
	T	Dec. 21			

Fall 2021 Calendar		
Based on 50 minute classes (MWF), 75 minute classes (TTH), 15 weeks of classes + Exams		
Orientation	Aug. 16	Monday
Advisement	Aug. 16	Monday
Registration	Aug. 17	Tuesday
Classes Begin	Aug. 18	Wednesday
Drop / Add for undergraduate and graduate level courses	Aug. 18 – 24	Wednesday - Tuesday
Holiday: Labor Day - No Classes	Sept. 6	Monday
Midterm	Oct. 11	Monday
Withdrawal Deadline	Oct. 25	Monday
Fall Break - No Classes	Oct. 29	Friday
Last Day of Classes prior to Thanksgiving Break	Nov. 23	Tuesday
Holiday: Thanksgiving - No Classes	Nov. 24– 26	Wednesday - Friday
Classes Resume	Nov. 29	Monday
Friday Class Schedule in Effect	Dec. 7	Tuesday
Classes End	Dec. 7	Tuesday
Reading Day	Dec. 8	Wednesday
Final Exams	Dec. 9 - 15	Thursday - Wednesday
Commencement	Dec. 17	Friday
Grades Due	Dec. 20	Monday, 12 PM

Final Exam Schedule Fall 2021

Mass Exam Schedule - Fall 2021

Class Prefix	Class Number(s)	Exam
ACCT	2101	Thur., Dec. 9 7:00 - 10:00 pm
BIOL	1107, 1108	Fri., Dec. 10 7:00 – 10:00 pm
BUSN	4000	Wed., Dec. 15 7:00 - 10:00 pm
CHEM	1210, 1211, 1212, 1311H, 1411, 2211, 2212, 2311H, 2312H, 2411, 2412	Wed., Dec. 15 7:00 - 10:00 pm
CSCI	4050, 6050	Wed., Dec. 15 7:00 – 10:00 pm
ENGR	2120, 2120H	Mon., Dec. 13 7:00 – 10:00 pm
FINA	3000, 3000H, 3001	Fri., Dec. 10 7:00 – 10:00 pm
FREN	1001, 1002, 1110, 2001, 2002	Mon., Dec. 13 7:00 - 10:00 pm
GENE	3200	Fri., Dec. 10 7:00 – 10:00 pm
GRMN	1001, 1002, 2001, 2002	Mon., Dec. 13 7:00 - 10:00 pm

Class Prefix	Class Number(s)	Exam
ITAL	1001, 1002, 1110, 2001, 2002	Mon., Dec. 13 7:00 - 10:00 pm
MARK	3000, 3001	Tues., Dec. 14 7:00 – 10:00 pm
MATH	1113, 2250	Tues., Dec. 14 7:00 – 10:00 pm
MGMT	3000, 3001	Thur., Dec. 9 7:00 – 10:00 pm
PHYS	1111, 1112, 1211, 1251, 1252	Thur., Dec. 9 7:00 - 10:00 pm
PORT	1001, 1002, 1110, 2001, 2002, 2120	Mon., Dec. 13 7:00 - 10:00 pm
RUSS	1001, 2001	Mon., Dec. 13 7:00 - 10:00 pm