

# SCI 1100: General Physics

MWF 8:00-8:50am, 103 WW3

Instructor: Chad McKell  
 Office Hours: By appointment, Academic House lower level  
 Email: cmac83@gmail.com  
 Cell Phone: 661-857-4778

Text:	<i>How Things Work: The Physics of Everyday Life</i> by Louis A. Bloomfield, 3rd Edition (available at campus bookstore)																
Course Description:	This is a survey course covering fundamental concepts of physics. General topics include kinematics, fluids, thermodynamics, electronics, and modern physics. There are no prerequisites for this course, however, a basic understanding of algebra and geometry is assumed.																
Blackboard:	<a href="http://blackboard.unca.edu/webapps/login/">http://blackboard.unca.edu/webapps/login/</a> I will post grades and class material on BB. It is your responsibility to check the site regularly for updates.																
Learning Objectives:	The course is designed to help you understand basic concepts of physics, learn what science is and how it advances, and gain an appreciation for how physics is relevant to you as an artist.																
Grading:	Below is a tentative breakdown for your final grade: <table style="margin-left: 40px; border: none;"> <tr> <td>Homework: 10%</td> <td>93% A</td> <td>80% B-</td> <td>67% D+</td> </tr> <tr> <td>Quizzes: 20%</td> <td>90% A-</td> <td>77% C+</td> <td>63% D</td> </tr> <tr> <td>Exams: 60%</td> <td>87% B+</td> <td>73% C</td> <td>60% D-</td> </tr> <tr> <td>Participation: 10%</td> <td>83% B</td> <td>70% C-</td> <td>&lt;60% F</td> </tr> </table>	Homework: 10%	93% A	80% B-	67% D+	Quizzes: 20%	90% A-	77% C+	63% D	Exams: 60%	87% B+	73% C	60% D-	Participation: 10%	83% B	70% C-	<60% F
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Homework:	Each homework assignment is assigned on Monday and due on Friday. Homework is graded based on participation (which means I will award points to the problems you attempt). I accept late homework, but the due date is in place to encourage you to keep to a set schedule so that you do well on the quizzes and exams (which represent a much larger percentage of your grade). I encourage you to form study groups and discuss problems together. Homework solutions will be posted on BB.																
Quizzes:	Quizzes are given every Friday at the end of lecture. They will consist of material discussed in the previous three lectures. If you miss a quiz, you will receive a 0% on that quiz. No makeup quizzes will be given.																
Exams:	Midterm exams will be given on <b>September 28<sup>th</sup></b> and <b>October 26<sup>th</sup></b> . If you miss an exam, you will receive a 0% on that exam. Please come see me if you know you will need to take the exam on a different day. The final exam will be given on <b>November 28<sup>th</sup> at 9:00 am</b> and <b>November 29<sup>th</sup> at 1:00 pm</b> .																
Participation:	I anticipate that a significant portion of the lecture period will be devoted to answering questions from the reading material and discussing difficult homework and quiz problems. At the end of the course, I will assess your overall participation and award you a grade. For this reason, I expect you to be on-time and alert for each class. You are allowed 3 absences without a grade penalty, but for every absence thereafter your participation grade will be reduced by one grade level (i.e. B to B-). Extenuating circumstances are considered on a case by case basis.																

Writing Center:	<p>The Writing Center is a free support service for UNCSA students. The goal of the Writing Center is to assist students with all kinds of writing, including academic papers, thesis work, and projects for arts classes. Scheduled term hours are posted on the UNCSA website on the “For Students” page. Students may drop by the Writing Center for help during open hours. No appointment is necessary. The Writing Center is located on the second floor of the <b>Academic Services House, 1915 Sunnyside Avenue</b>. <b>For further information contact Elizabeth Klaimon, Director of the Writing Center. Email: <a href="mailto:klaimone@uncsa.edu">klaimone@uncsa.edu</a> Phone: (336) 631-1515.</b></p>
Plagiarism:	<p><b>DO NOT PLAGIARIZE.</b> If you take this course you are responsible for understanding the school’s guidelines on academic honesty (available in the <i>Bulletin</i>). Therefore, any act of plagiarism in any course assignment will result in an automatic “F” for the course, a letter explaining the nature of the plagiarism will be sent to your Arts Dean, and a copy placed in your UAP student file. Students receiving a grade of “F” for a violation of an academic policy such as plagiarism may not use the grade replacement policy to replace this grade. Plagiarism is “literary theft.” It is a betrayal of your own personal integrity and that of the UNCSA community. In any written assignment for the class you must cite the sources you use. If you borrow words (quoted or paraphrased) or ideas from <b>any</b> source, a book, journal, textbook, fellow classmate, web site, or other media source, you must credit the original source. If you are in doubt about whether you should cite something, play it safe and do so. As a rule of thumb, err on the side of unnecessary citation rather than failing to attribute credit where it is due. You are responsible for reading and understanding these policies. A failure to have done so will not be an acceptable excuse for any violation. Here is a link to a very thorough explanation of plagiarism:  <a href="http://www.unc.edu/depts/weweb/handouts/plagiarism.html">http://www.unc.edu/depts/weweb/handouts/plagiarism.html</a></p>
Students with Disabilities:	<p>In compliance with the UNCSA policy and equal access laws, I am available to discuss appropriate academic accommodations that may be required for students with disabilities. Note that accommodations will not be granted without appropriate written documentation. Upon entrance to the course, students are encouraged to register with the Officer for Student Disabilities to verify their eligibility for appropriate accommodations.</p>
Early Departure:	<p>While Early Departure before the end of the term is discouraged, UNCSA recognizes that, from time to time, extenuating circumstances will necessitate approval of such Early Departure. Students seeking permission to leave school early should meet with the Assistant Dean of Undergraduate Academic Program and with their Arts Dean to obtain a permission form and to discuss Early Departure. (<b>NOTE:</b> Travel or vacation plans are NOT acceptable reasons for Early Departure. Students should carefully consult the academic calendar and plan accordingly.) For approval of Early Departure from undergraduate academic and arts classes, an <b>Early Departure Form</b> must be signed by the appropriate academic and arts instructor(s) and returned to the Assistant Dean of Undergraduate Academic Programs and the Arts Dean <b>no less than three weeks prior to the end of the term</b>. Students who leave campus before the end of the term without having been granted the appropriate permission will be considered to have unexcused absences.</p>

Unit	Date	Case Study Topic	HW	Read
The Laws of Motion	M, 08/20	Introduction		
	W, 08/22	Skating		1.1
	F, 08/24	Skating		
	M, 08/27 <sup>A</sup>	Falling Balls		1.2
	W, 08/29	Falling Balls		
	F, 08/31	Falling Balls	1	
	W, 09/05	Ramps		1.3
	F, 09/07	Ramps		
	M, 09/10	Ramps		
	W, 09/12	Ramps		
	F, 09/14	Seesaws	2	2.1
	M, 09/17	Seesaws		
	W, 09/19	Wheels		2.2
	F, 09/21	Bumper Cars	3	2.3
Electronics	M, 09/24	Audio Players		12.2
	W, 09/26	Review		
Mechanical Objects	F, 09/28	Spring Scales		3.1
	M, 10/01	Spring Scales		
	W, 10/03	<b>EXAM 1</b>		
	F, 10/05 <sup>W</sup>	Bouncing Balls	4	3.2
	M, 10/08	Bouncing Balls		
	W, 10/10	Carousels & Roller Coasters		3.3
	F, 10/12	Carousels & Roller Coasters	5	
	M, 10/15	Bicycles		4.1
	W, 10/17	Bicycles		
	F, 10/19	Bicycles		
	M, 10/22	Rockets and Space Travel		4.2
	W, 10/24	Rockets and Space Travel		
	F, 10/26	Review	6	
	M, 10/29	Review		
Fluids	W, 10/31	Balloons		5.1
	F, 11/02	<b>EXAM 2</b>		
	M, 11/05	Balloons		
	W, 11/07	Water Distribution		5.2
	F, 11/09	Water Distribution	7	
Resonance & Mechanical Waves	M, 11/12	Clocks		9.1
	W, 11/14	Musical Instruments		9.2
	F, 11/16	Musical Instruments	8	
	M, 11/19	Review		
	M, 11/21	NO CLASS		
	T, 11/27	SPECIAL REVIEW		
	W, 11/28	NO CLASS		
	Th, 11/29	<b>FINAL EXAM, 1-4 pm</b>		