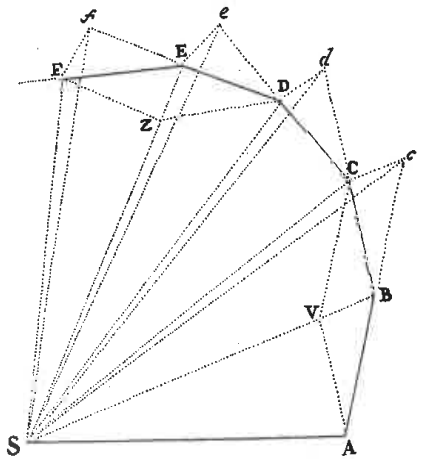


Calculus-based Physics I
Physics 201
Fall 2026
Professor: Dr. Brian Davis
Office: DL-207
Office Hrs:12:15->13:45 in:
DL224 (M & W); DL205 (F)
email: davis@uncw.edu



"Let the time be divided into equal parts, ..."
Isaac Newton

Portrait of Isaac Newton
(in his real hair (not a wig)

Calendar of Class Days

	Monday Class	Tuesday & HomeWork due dates	Wednesday Class	Thursday (Lab & Test Day)	Friday Class
Aug.	17	18	19 C01#1	20 Measurement Lab	21 C01#2/C02#1
Aug.	24 C02#2	25 HW#1 on 8/25	26 C02#3	27 Gravitational Acceleration	28 C02#4/C03#1
Aug.	31 C03#2				
Sep.		1 HW#2 on 9/1	2 C03#3/C04#1	3 Force is a Vector Lab	4 C04#2
Sep.	7 **Labor Day**	8 HW#3 on 9/8	9 C04#3	10 Uniform Circular Motion	11 C05#1
Sep.	14 C05#2	15 HW#4 on 9/15; HW#5 on 9/21	16 C05#3	17 **Test#1: Chapters:1->4**	18 C06#1 **Newton**
Sep.	21 C06#2	22 HW#6 on 9/25	23 C07#1	24 Conservation of Energy Lab	25 C07#2
Sep.	28 C07#3/C08#1	29 HW#7 on 9/30	30 C08#2		
Oct.				1 Elastic Collisions Lab	2 C08#3
Oct.	5 C08#4/C09#1	6 HW#8 on 10/7	7 C09#2	8<----------**Fall**-	9---**Break**--->
Oct.	12 C09#3	13 HW#9.1 on 10/16	14 C09#4	15 **Test#2: Chapters:5->8**	16 C09#5/C10#1
Oct.	19 C10#2	20 HW#9.2 on 10/21	21 C10#3	22 Torque & Equilibrium Lab	23 C10#4/C11#1
Oct.	26 C11#2	27 HW#10 on 10/28; HW#11-11/2	28 C11#3	29 Center of Mass Lab	30 C11#4/C12#1
	Clock-change Day 1st Sunday in Nov. (11/1): leave the business-orientated Eastern Daylight Savings Time (EDT) and return to the Astronomically-orientated Eastern Standard Time (EST) by falling back 1 hour.				
Nov.	2 C12#2	3 HW#12-11/06	4 C12#3/C13#1	5 Simple Harmonic Motion Lab	6 C13#2
Nov.	9 C13#3	10 HW#13-11/13	11 C13#4/C15#1	12 **Test#3: Chapters:9->12**	13 C15#2
Nov.	16 C15#3/C16#1	17 HW#15-11/23	18 C16#2	19 Standing Waves Lab	20 C16#3
Nov.	23 C16#4/C14#1	24 HW#16-12/2	25 <----------	26<----------**Thanksgiving**-	27-**Vacation**--->
Nov.	30 C14#2				
Dec.		1 Lab Day = Lecture Catch up	2 C14#3	3 **Reading Day with Help Ses.**	4
Dec.	7*Final Exam* at 11:30 AM -> 2:30 PM in our Lecture Room				

***In the above Calendar: Each Class Day is followed with the Chapter being covered and the Lecture #; for example: C05#3 => 3rd Lecture in Chapter 5.

Class Time: MWF @ 11:00 AM->12:15 PM in DL 212. **Office Hours:** 12:15->1:45 PM in DL 224 on MW & DL205 on F.
Tests are administered on Thursday Evenings during our scheduled Evening Time Slot at 7:00-->8:50 PM.
Lost Time due to Weather, etc may be made up during that Evening Time Slot (7:00 -> 8:50 PM) or via recorded lectures.
Be Careful on Homework due Dates they are not due on the Tuesday calendar date they are listed on.
The above lecture schedule is tentative. We may cover a Chapter in a bit more or less time than what is indicated. If that happens, then we will try to compensate via the ensuing Chapters to get back on schedule.
HomeWork: will be assigned on a Regular Basis. The Submission of HomeWork will be via the wileyplus.com Website...
Register for PHY_201_Davis_Fall_2026 **@** www.wileyplus.com/go/login **Your Course Section ID is C84206.**
If your Homework Grade is a C or Higher, then you have the opportunity to drop a Lowest Test Score as explained in the attached 'HomeWork Policy' (which you need to read carefully).
Lab Policy: You must complete all Labs Satisfactorily; otherwise, each Missed or Unsatisfactory Lab Grade will result in a 1 T-score point reduction in your Final Course Grade for the Class! This policy is harsh because these Labs are so straightforward that anyone should be able to satisfactorily complete them. If you make an error that results in an Unsatisfactory Grade, then you will be given the opportunity to correct the error for a Satisfactory Grade. There are NO make-up Labs.

The Content of the 1st Semester of Introductory Calculus-based Physics is for the most part:
Classical Mechanics (or *Newtonian Mechanics*) which is comprised of:
Kinematics (the description of Motion) & *Dynamics* (the explanation of Changes in Motion due to Forces).
Historically this subject was almost entirely presented in one single work:
Mathematical **PRINCIPLES** of Natural **PHILOSOPHY"** or The **Principia** (for short) by Isaac Newton(1642-1727) in 1687.
Newton also invented Calculus, first & independently of Leibniz, which you are concurrently studying in MAT 161.
When Newton said: "If I have seen further it is by standing on ye sholders [sic] of Giants.",
he was referring to Copernicus (1473-1543), Kepler(1571-1630) and Galileo (1564-1642).
Others Contributors to Mechanics were: Huygens(1629-1695), Leibniz(1646-1716), John Bernoulli(1667-1748), D'Alembert(1717-1785), Maupertuis(1698-1759), Euler(1707-1783), Lagrange(1736-1813), Hamilton(1805-1865), Jacobi(1804-1851), and Gauss(1777-1855).

Our Scientific Knowledge should be diverse and up-to-date, therefore it is suggested to:
read a Monthly Journal dealing with all the Sciences, an appropriate Magazine that is not too detailed is **Scientific American**, and to
attend Scientific Seminars on our University Campus in order to be introduced to new ideas & current research.
Physics Colloquia occur on advertised Fridays at 14:00 (2PM) in our Lecture Room (DeLoach 212).

If you continue studying Physics after the 2nd Semester (PHY 202: is a study of Electricity & Magnetism & Light), then you should take what might be thought of as the 3rd Semester of Introductory Physics:
Modern Physics (PHY 335): (the term applied to the Physics developed after the beginning of the 20th Century): which is an introductory survey study of Relativity and Quantum Physics.
If you decide to be a Physics Major or Minor you should take PHY 321, Classical Dynamics I, at the same time.

COURSE MATERIALS (Available at the Bookstore)

TEXT BOOK: |1> Fundamentals of Physics (12^{th} edition), by Halliday, Resnick, and Walker
|2> WileyPlus for Homework Submission (**NOTE:** This is bundled with the loose-leaf Text)
The Bookstore is offering the *The Binder Version* of this normally Bound TextBook - it is designed to be put in a Binder Notebook with 3 punched holes. The cost is ≈ half of what it would be for the Hardbound Text. An advantage is that you can carry single Chapters with you. You can also purchase just the electronic text along with WileyPlus directly from Wiley while registering (or from the Bookstore; I don't know which is cheaper.)

The course material for this problem-solving course is so large that we must maintain a *Forced March* in order to cover a satisfactory amount of material. This does not allow much time to be taken to describe qualitatively many interesting physical phenomena. This discussion is important for a well-balanced physics education, but unfortunately, it is only easy to accommodate in the less-math orientated physics courses. It is my hope that supplemental reading in *The Flying Circus of Physics* which is available on-line via the WileyPlus WebSite will substitute somewhat for this omission.

Grading will be done "on a Statistical Curve" via the Class Average and the Standard Deviation: This forces the Average Score in the Class to be Middle C. The boundaries of the Grades are determined by the Standard Deviation.
Your "Final Grade" in the course will be based on 3 Semester Tests, and 1 Cumulative Final Exam.
Each Semester Test counts 23%, and the Final Exam counts 31% to your Final Grade.
The HomeWork Policy may allow you to replace your lowest Semester Test score - See HomeWork Policy.
Your grade on a Test, the Exam, and your HomeWork is determined statistically via the "Class Average" and "Standard Deviation" for that Test, Exam, or HomeWork.
Your numerical "T-score" grade (ie curved or statistical grade) is computed as follows:

$$\textbf{T-score} = \frac{(YS-AV)}{SD} \times 10 + 50$$

As a result of this definition, 1 Standard Deviation in the T-scores corresponds to 10 T-score Points.

Where: YS = Your uncurved score = the number of points that you got correct on a Test or on your HomeWork.
AV = The Average uncurved score in the Class, and SD = The Standard Deviation of the uncurved scores.
Letter-grade Breakdown via T-score Grades: A: 60 -->, B: 55 --> 60, C: 45 --> 55, D: 40 --> 45, F: 0 --> 40
Books, Notes, Formula Sheets, and Computers will NOT be used on the Tests.

Semester Tests consist of: approximately 12->16 Multiple-choice Problems, and 1->2 Free-response Problems where you show your critical-thinking work while solving the Problem with symbols for problem's variables.
The Optimum Method to prepare for Tests: |1> Read & Study the Text before and after the corresponding Lectures in Class. If our Text does not "work" for you, then try another Physics text book from the library.
|2> Be diligent with respect to the Homework assignments. Write out the Solutions to the Homework Problems in detail, step by step, with well-constructed Diagrams. Keep this work in a Homework Notebook; it will be your Best Study Tool for the Tests. **Homework is the Key** to learning Problem Solving and doing well in this course.

The Goal of the Class and How it is carried out: To learn the Fundamental Principles of Physics: Newton's Laws; The Work-Energy Theorem and The Conservations Laws of Energy, Linear Momentum, and Angular Momentum.
We will use these Principles and Calculus to study: The Gravitational Field and Orbital Mechanics; Oscillations of bodies about their Equilibrium positions; Mechanical Waves in Physical Media; and Fluid Dynamics.
We will gain deeper knowledge of the Principles and the Critical Thinking Process by solving Problems.
After completing both PHY 201 & PHY 202 you should be able to understand virtually every Physical Phenomena you observe in life with the exception of Modern Technology's use of the Quantum Theory.
Unlike many courses you have had, success does not come from memorization, writing papers, doing projects, or checking off activity boxes. Success comes purely from being able to solve Problems similar to those in the Homework or on Tests where your only resources are a pencil, a calculator, and the knowledge you carry in your brain.
Two components to this Course will prepare you to be able to accomplish the Goal. The first component is my Lectures where I use my experienced background to pass the Physics Knowledge over to you. If you are able to use this Knowledge along with that gained from our Textbook to confidently solve the Homework Problems, then you do not need the second component that I offer in my Office-Hour Help Sessions which occur immediately after Class. These sessions are completely different from just being lectured too. They follow the Socratic mode of teaching where Students ask questions about the Class Material or a Physics Problem (from Homework or not) and understanding is gained by back-and-forth dialogue between Professor and Student.

Office-Hour Help Sessions: after every Class at 12:15->1:45 PM I will conduct Help Sessions during my Office Hours. These Office-Hour Help Sessions will be held in the PHY 201 Problem Solving Room(s), see below.
Extra Help will be given during Lab on those Thursdays that we have Tests: 9/17, 10/15, and 11/12. I will also offer a Help Session on Reading Day, 12/3, for the Final Exam probably starting at our normal class time, 11 AM.
The PHY 201 Problem Solving Rooms: DeLoach 224 (MW) & 205 (F) is reserved for us after Class at 12:15-1:45 PM.
The purpose of having my Office-Hour Help Sessions in a Classroom is so I can help many people at the same time with a large Blackboard to work through Problems with you. This will also be a time & place where this Class can work together on Homework and receive Help from me when needed. This is the perfect opportunity for students in the Class to get to know each other and me, and to share knowledge. I hope that the environment

that this Homework room creates will be conductive to your Physics Education, lead to new friendships, and perhaps even set you on a road to a future which includes Physics Reasoning (The epitome of what has become known as Critical Thinking). You may bring lunch with you; be neat and clean up afterwards. Coming to these office-hour help sessions has Helped many students get through Physics with better grades in the past. Consider coming before we have our first Test; my past experience in this class is that I have better attendance after the first test is returned. Coming to the Office Hour Help Sessions is a Positive factor for Borderline-Grade Adjustment and for receiving the benefit of Test Grade Replacement (**see Homework Policy below**).

HomeWork Policy and **Test-Grade Replacement** (which can seriously improve your Final Grade in this course):
I have become aware that with a little effort Students are able to get solutions to all the Homework Problems from the Internet. This makes it unfair to assign a grade for doing Homework, however, Homework is absolutely necessary for success in a Physics Class. My solution to this dilemma is the following policy which will allow you to replace the lowest of your three Semester Test Grades with the Grade you get on the *New Material* on the Cumulative Final Exam. The Final Exam in the course is Cumulative - it includes questions that cover *Old Material* (that which was previously tested by three Tests during the Semester), and questions dealing with *New Material* (that which was not covered on a previous Test). I will emphasis this *New Material* on the Final Exam.
To obtain the privilege of possibly replacing your lowest Semester Test grade with that on the New Material:
|1> You must have half of the total number of HomeWork Points, 2330/2 = 1165.
|2> You must ALSO have a Homework Grade higher than a C (ie higher than ½ Standard Deviation below the Average) OR I have proof that you have worked hard on the Homework by your *Regular Participation* in the Office-hour Help Sessions where I take attendance.
In addition to your Final Exam Grade which is a result of both the *Old & New Material*, I will construct a Grade (Test #4) from the *New Material*. I will determine the Average & Standard Deviation for the *New Material* for those Students who have satisfied the preceding two conditions and if your T-score on the *New Material* is higher than the lowest of your three Semester Tests (this does not include the Final Exam Grade), then it will replace that lowest Semester Test Grade. My Goal is to simply reward those who seriously work on their Homework. My Solution is not perfect - Students who accept illicit help on the Homework still gain a point advantage (actually these Students may find that they are unable to solve problems by themselves when they are faced with a Test), but they still must perform well on the *New Material* which requires knowledge of how to work the Problems. To participate in this HomeWork Policy you are **required to have WileyPlus** which comes bundled with the Text purchased at the Bookstore or from the Publisher. WileyPlus can also be purchased separately; it automatically comes with an Electronic Version of the Textbook. WileyPlus is necessary for the uniform and impartial grading of the over two hundred Homework Problems that I assign.
HomeWork: will be assigned on a Regular Basis. The Submission of HomeWork will be via the wileyplus.com WebSite:
Register for PHY_201_Davis_Fall_2026 **at** **www.wileyplus.com/go/login**; **your Course Section ID is C84206.**

Please do not "Game or Disrupt the System": Since the Covid Years, I have encountered some Physics Students attempting to "Game the System". By that, I mean trying to gain the benefit of Test-Grade Replacement by means that were not intended and which breaks the spirit of the Help I am trying to give you in the Office-Hour Help Sessions. In the past I did not require Condition #|1> (ie requiring that you have half the Homework Points) for Grade Replacement. As a result, some Students stopped doing Homework entirely and instead came to the Office-hour Help Sessions on a regular basis in order to get the Grade-Replacement option. This completely destroys the spirit of these Help Sessions which are to improve your ability to solve Physics problems. Therefore, I had to start requiring Condition #|1> for Grade Replacement. If you come to the Help Sessions, then it is a simple job to obtain half the Homework Points. Every semester after adding Condition #|1>, I now have Students telling me at the end of the Semester that they were not aware that they had to have half the Homework Points to gain Grade Replacement if they came to the Office-hour Help Sessions. Therefore, let this discussion reinforce my TWO requirements for Grade Replacement! On another note ...
Students talking in Groups about topics unrelated to Physics, especially in loud voices, at the Office-hour Help Sessions is disruptive. It distracts me, impairing my concentration, and I suspect that's true for the Student's that are trying to learn something. It is difficult for me to tell a Group who are laughing and having a good time that they are being disruptive. Therefore, I respectfully ask you to refrain from what others may find to be disruptive and either contribute to the spirit of the Help Sessions, or quietly listen and learn from the discussions of the rest of us.

Borderline-Grade Adjustment: If I assigned the Final Letter Grades based entirely on your T-scores for the three Semester Tests and the Final Exam via the Formula: Final T-grade ≡ 0.23(T1 + T2 + T3) + 0.31(T-exam), then the Quality-Point Average for the Class would be 2.00. This 2.00 Average may be increased by The Homework Option discussed above. I may also find natural divisions in the Distribution of Final T-grades and execute Borderline-Grade Adjustment which would further increase the Quality-Point Average for the Class. Depending on the situation and taking all factors in consideration, I may bump: a B grade up to a B+ or A-; a C grade up to a C+, B-, or B; a D grade to a D+, C- or C grade, and a F grade up to a D-, D, D+, or C- grade. I typically increase the Quality-Point Average of the Class up to a 2.33 or more rarely higher. Positive factors for receiving a grade "bump up" are: being at a defined or deemed natural division, Participation in the Office Hour Help Sessions, Class Attendance, Laboratory Performance, Homework, attendance at *Outside-of-Class Activities*, and scoring a respectable number of points on the "free-response Problems" on Semester Tests. Negative Factors for receiving a grade "bump up": missing Lecture Classes and/or Labs, poor homework, continued use of your phone during Class after being warned not to, and consistently poor performances on the "free-response Problems" on the Semester Tests. I am Always Fair and Unbiased in my Final Grade deliberations. Because the following three ingredients are absolutely needed for success in this Class: Class Attendance, homework, and the ability to show critical thinking on the free-response test problems ...
No Borderline-Grade Adjustment will be given to a Student who: has Poor Attendance (see Attendance Policy) or has less than half the total number of Homework Points (1165 = 2330/2) or has received no partial-credit points on any of the Free-response Problems on the three Semester Tests ... **Please NOTE these facts!**
If a Student is denied borderline-grade adjustment for the above reasons, and if I believe there are extenuating circumstances, then I reserve the right to bump that student up a fraction of a letter (which I am able to do because I incorporate +/- on the final letter grades that I give).
Rational for No Borderline Grade Adjustment: I do not want to reward Students who are not hard-working or do not take the course seriously as evidenced by ignoring the above three ingredients for success.

Attendance Policy: Required Attendance. *Please* follow the ACADEMIC HONOR CODE (see your student handbook)
Class Attendance: I will periodically take Class Attendance. Poor Attendance is defined by missing 5 or more classes (I may choose a larger number of missed classes at the end of the semester, but NOT smaller). Students with Poor Attendance will not be considered for Borderline Grade Adjustment based on Attendance. Therefore, a Student with poor Attendance may receive a lower Final Letter Grade than a Student with a lower Final T-grade.
Outside-of-Class Activities (more examples, like Astronomy Viewings, may occur than what are listed here):
Newton's Dark Secrets PBS Documentary which highlights the Life of Sir Isaac Newton will be shown during Office Hours after Class on September 18. It is my experience that not many Students have questions on Homework the day after an Evening Test. Therefore, this is an Optimum Time for this Outside-of-Class Activity. While you are watching the Documentary, I will have the Multiple-Choice Component of your Test scanned and have the results available for you to see after the Documentary is over.
Physics Colloquia: are also considered ***Outside-of-Class Activities***. These are scheduled on some Fridays at 2 PM in our Lecture Room; they will be advertised by posted Abstracts in the Halls of the Physics Department.
Record Your Attendance at *Outside-of-Class Activities* by personally signing a Sign-in Sheet. Good Manners dictates that we should not sign a Sign-inn Sheet during the Physics Colloquia in the presence of our invited Speaker! Therefore, a Sign-inn Sheet will be made available at the beginning and end of the Monday Lecture after a Colloquia on Friday.

Live Class Lectures, Recorded Lectures, and Class Example Problems: Before Covid I lectured without notes and used the blackboard to make diagrams & lecture notes. When we went online, I was faced with making recorded lectures with no online materials. I purchased a tablet so I could use Microsoft Whiteboard to create diagrams and lecture notes to facilitate my online recorded lectures. After that first online semester I abandoned Whiteboard in favor of Microsoft OneNote. I will use the OneNote Notebooks, that I put so much work into, to lecture with. I wrote out detained notes that I would not expect Students to transcribe verbatim. You should take notes that are much reduced. Taking notes on derivations of equations is important. I will send you a link to all the recorded lectures that I made for PHY 201. These are NOT meant to be a substitute for coming to my lectures which are required. They are only meant to be a resource in case you are unable to attend a lecture; the recoded lectures will allow you to keep up with the course. Of course, you can always view any recorded lecture after attending the in-class lecture if you want to review a certain part of the lecture material. I spoke very slowly when I made the online recorded lectures, much slower than what you will experience in a live lecture. The length of the recoded lectures are perhaps greater than a single live lecture; this results in the recorded lectures not coinciding with our coded-number class lectures. Regardless of this, you should easily be able to find missed lecture material with the recordings which are titled by the Chapter they cover: example C8_2 means 2nd lecture in Chapter 8. The recorded Lectures can be paused so you can examine the accompanying notes in the OneNote notebooks.
Example Problems covered in Class: Example Problems covered in Class are very important. I do not cover easy text example problems in Class since you already have that resource. I work nontrivial Text Homework Problems rather than simple problems so you see the more difficult solving techniques put to use; this is what will help you on the Homework. These Class Example Problems, solved by me, are available to you on The PHY 201 webpage; a link to my course WebPage is http://people.uncw.edu/davis/phy201.html. If you were to Print these Solutions, then you could take Notes on them in Class rather than copying all my work into your notes. My OneNote notebooks, that I teach from in Class, may have additional information written on these Problem Solutions.

The use of Phones for Homework: You can get the answers to any of the Homework Problems with your phone via: 1> AI solutions, or 2> WebSites that have solutions to all Homework Problems in all Physics Textbooks.
In addition to the answer to a Problem you can request the steps in the solution. Students think they are learning Physics by browsing the solution steps - it seems to be a straightforward means to learn Physics the Easy Way. Unfortunately the Easy Way doesn't work; you need to think and work toward the solution, making mistakes and learning from your mistakes to be able to solve Problems on your own on the Test. I am certain of this as a result of teaching Physics for 50 years; I see this play out every year.

No Phones or Other Smart Devices to be used in Class or during Testing: In the Past (previous to the Spring 2026 Semester) I tolerated the limited use of phones in Class because I thought that you should be able to use them for emergency messaging. For instance, my wife is in poor physical shape from an autoimmune disease that she acquired at the end of the Fall 2023 semester. I need to be able to receive any emergency call from her. When I observe continued, prolonged use of phones in Class I explain: "During my Physics Lectures I need your undivided attention. If you interrupt your train of thought by interacting with your phone, then when you return your attention to the Lecture you find yourself lost and you have destroyed my attempt to convey to you an understanding of a complex Physical Phenomena." As time went on, I realized that these pleas for your attention over your phone usage were futile. Some Students come to Class diligently, but their minds wander with the result that they have wasted their time in Class; phones exasperate this problem. Therefore, I have sadly been forced to ban the use of phones and other smart devices from my Class. Phone usage has resulted in having to set a Cheating Policy for this Class...

The Consequences of Cheating in this Class: In order to preserve the integrity of your grades I have been forced (starting in Spring Semester 2026) to adopt the following **Cheating Policy**: If you are caught cheating, then you will receive an F for the course. This will be carried out by the Policies of The Office of the Dean of Students. You can opt for either: 1> Private Resolution (PR) where the Professor and the Student agree on a resolution (F in the class in this case). The PR is kept in the Dean of Students Office in case there is another case of the Student cheating at UNCW. A Student is only allowed one PR at UNCW, and therefore, the second offence will be handled by the Dean of Students Office. 2> The Student Academic Honor Board (3 students and 2 faculty) holds a hearing to decide on the imposed sanctions (ranging from a disciplinary probation status up to suspension from UNCW). The Professor still decides on the final grade in the course (an F in the class in this case). The Obvious choice is 1> because if you are not accused of cheating again at UNCW, then no record is kept on your transcript of your cheating.
I was lucky to determine that the Student who had by far the highest grade on the Final Exam for PHY 201 in Fall 2025 had used AI on his phone to get the correct answers. If his high grade had been in the Final Exam statistics then other Students would have had lower letter grades for the course. I worry that a couple other students got higher grades than what they deserved by cheating on that Final. I am determined not to allow any more cheating on my Tests. I have never liked walking around the classroom during a test; it makes me feel like a policeman.

I feel like I am insulting the integrity of honest Students by scrutinizing them. I must not allow these feelings to interfere with my proctoring; I need to equally watch all Students. Please understand this if I want to know if there is a phone under your calculator cover or just a calculator.
AI has caused an explosion in cheating on Physics Tests around the world. I see this Phenomena as follows: Students of your generation have grown to rely on their phones for success in many things. You get through your homework assignments with your phone. When it comes to Test time you realize that to do well, you need to use your phone. This situation causes Students who may otherwise be honest to lower themselves to cheating. Please do not trade your Moral Integrity for a higher grade and in the process lower the grades of your honest classmates. Eliminating Cheating requires the efforts of the Students as well as the Professor. If you see cheating, then you should let the Professor know; by doing so you will be upholding justice, while by not getting involved you will be helping a dishonest student get a higher grade at the expense of lowering the grades of your honest classmates.

Testing Policies: The three Semester Tests and the Cumulative Final will be administered in our lecture room and will be proctored. On those four Tests you will NOT be allowed any Notes or any other aids whatsoever. You may only use a hand-held calculator, pencil, and some scratch paper which will be handed out with the Tests and the Scan Tron sheets. You do not need to buy a Scan Tron and bring it with you to the Test; the Physics Department will supply them. Space will be made on the copy of the Test so scratch work can be done next to the Question you're solving. Your calculator may not have any stored equations or notes dealing with Physics. If it does, then you will receive a zero for that Test. During all the Tests your phones and smart watches/devices must be turned off and placed in a supplied envelope. You may NOT use your phone for a calculator. If you need to use the restroom during a Test, then you may not take your phone with you. Breaking the smart phone rule can result in a zero for the test.

If a Student is unable to take a Semester Test or the Cumulative Final Exam in person with the Class, then a possible alternative to giving that Student the same Final Exam or Semester Test is to generate another Final or Test composed of an appropriate number of Problems to be solved by the Student showing their work. I will assign partial credit when grading these written-out problem solutions. This is to avoid having to construct a Final or Test with a large number of multiple-choice problems which is an extremely time-consuming endeavor.

If we are forced to go to Online Testing during the Semester: then we will use the lock-down browser and you will be required to have a webcam in order to be seen and recorded during online testing. The reason for this policy is the cheating that I detected when the University went to online instruction & testing in Spring 2020.

The University Studies Contribution to my Syllabus follows:
Faculty who teach courses relating to "Scientific Approaches to the Natural World" are required by the University to have the following SLOs (Student Learning Outcomes) listed in their Syllab:

SAN 1. Demonstrate an understanding of basic scientific principles, theories, and laws as well as an awareness of the changing nature of science.[Foundational Knowledge, Inquiry, Critical Thinking].
Yes, this Physics Course definitely covers the above statement. In Fact, Critical Thinking (a Holy Grail that has recently been sought at our University) is a by-product of taking this course.

SAN 2. Analyze, and evaluate scientific hypotheses and theories using rigorous methodologies and approaches from the sciences (including statistical and mathematical techniques). [Foundational Knowledge, Inquiry, Information Literacy, Critical Thinking]
Yes, the Principles of Physics that you will be introduced to have been meticulously scrutinized since their inception by the greatest minds and experimental equipment. We should always keep an open mind and judge the Principles based on Phenomena. You will be learning Calculus for Physical Scientists (MAT 161 for PHY 201 and MAT 162 for PHY 202) as a Pre- or Co-requisite for this course. The Calculus will be used as the foremost Mathematical Tool for solving problems with the Principles of Physics.

SAN 3. Demonstrate the ability to write and speak critically about the essential questions addressed by the natural sciences, expressing such thinking by using the conventions and language of one of those disciplines. [Critical Thinking, Thoughtful Expression]
Yes, I must be able to understand the solutions you construct to Test Questions that you will be graded on.

PHY 201 satisfies a requirement for the Integrated STEM (iSTEM) with Teaching Licensure minor. Students earning a B.S. degree in Physics can complete the minor and earn their teaching license to be certified to teach at the middle school or high school level in the North Carolina public school system. Please visit uncw.edu/istem for more information.

CL-SLO 1: Demonstrate knowledge of connections among two or more STEM disciplines.
CL-SLO 2: Apply STEM problem solving methodologies, such as the scientific method, the engineering design process, or modeling, to real world problems.

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