

UMBC – PHYS 100 – Ideas in Physics – Fall 2014
Dr. Don Engel – donengel@umbc.edu
Syllabus

Course Description: Ideas in Physics is a one-semester, general-interest course for the non-science major, introducing concepts of classical physics such as mechanics, electromagnetism, thermodynamics and optics, along with how a physicist views the world.

Classes: Mondays, Wednesdays, and Fridays, 10:00am-10:50am
Math & Psychology Building, Room 102

Office Hours: Mondays, 12pm-12:50pm, ITE Room 220.

Required Items: *Conceptual Physics* (12th edition, by Paul Hewitt), *Turning Technologies clicker*.

Grading: 30% final exam, 25% midterm, 25% homework, 20% clicker questions. Not all clicker questions will be used for scoring; some clicker questions will be for polling and pacing and will be announced as such. Clicker scores will be averaged daily and the worst two days will be discarded before calculating each student's overall average. Similarly, the worst two homework scores will be dropped before the average homework score is calculated. Other than those that are discarded in this way, all homework assignments will be weighted equally, as will all days of clicker questions.

Blackboard: Access Blackboard between classes for course materials, discussion forums, your grades, helpful advice, and announcements.

Registering Your Clicker: From Blackboard, go to Tools/Turning Point Registration Tool. The Response Device ID is the 6-digit code below the bar code on your clicker. Register your clicker once, and you're good to go for all your classes that use clickers.

Reading assignments: The day-by-day guide later in this syllabus outlines the readings expected before each class.

Lecture: Students are expected to attend every lecture in full. Your grade will reflect this because you can only receive points for clicker questions if you are present. To allow for extenuating circumstances such as family emergencies and religious observances, the worst two days of clicker questions (including those caused by absence) will be dropped before the average score is calculated.

Academic Integrity: By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult [UMBC policies](#), or the [Faculty Handbook](#) (Section 14.3).

Courtesy: Cell phones and other electronic devices (other than the clickers) must be kept in pockets or bags and kept off or on vibrate.

Day-by-Day Guide to PHYS 100

	Monday	Wednesday	Friday
Aug 25 - Aug 29	SUMMER BREAK	Welcome to PHYS100	About Science Chapter 1
Sep 1 - Sep 5	LABOR DAY	Mechanics Chapter 2	Mechanics Chapter 3
Sep 8 - Sep 12	Mechanics Chapter 4	Mechanics Chapter 5	Mechanics Chapter 6
Sep 15 - Sep 19	Mechanics Chapter 7	Mechanics Chapter 8	Mechanics Chapter 9
Sep 22 - Sep 26	Mechanics Chapter 10	Matter Chapter 11	Matter Chapter 12
Sep 29 - Oct 3	Matter Chapter 13	Matter Chapter 14	Mechanics and Matter Review
Oct 6 - Oct 10	Heat Chapter 15	Heat Chapter 16	Heat Chapter 17
Oct 13 - Oct 17	Heat Chapter 18	Sound Chapter 19	Sound Chapter 20
Oct 20 - Oct 24	Sound Chapter 21	Heat and Sound Review	Midterm
Oct 27 - Oct 31	Electricity & Magnetism Chapter 22	Electricity & Magnetism Chapter 23	Electricity & Magnetism Chapter 24
Nov 3 - Nov 7	Electricity & Magnetism Chapter 25	Light Chapter 26	Light Chapter 27
Nov 10 - Nov 14	Light Chapter 28	Light Chapter 29	Light Chapter 30
Nov 17 - Nov 21	Light Chapter 31	Electricity, Magnetism and Light Review	Atomic & Nuclear Chapter 32
Nov 24 - Nov 28	Atomic & Nuclear Chapter 33	Atomic & Nuclear Chapter 34	THANKSGIVING BREAK
Dec 1 - Dec 5	Relativity Chapter 35	Relativity Chapter 36	Atomic, Nuclear, and Relativity Review
Dec 8 - Dec 12	Final Review Q&A	STUDY DAY	FINAL EXAMS (our exam date is TBD)