The Physics 103-104 sequence is a general physics course serving a broad spectrum of Bachelor of Arts students. Physics 103, 104 are each five credit-hour courses. The following is a statement from the University about GEC Physical Science courses: "Physics 104 is a Physical Science course in the Natural Science category of the GEC. The goals and objectives for this category are:

Goals/Rationale:

Courses in natural sciences foster an understanding of the principles, theories and methods of modern science, the relationship between science and technology, and the effects of science and technology on the environment.

Learning Objectives:

1. Students understand the basic facts, principles, theories and methods of modern science.
2. Students learn key events in the history of science.
3. Students provide examples of the inter-dependence of scientific and technological developments.
4. Students discuss social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

The course meets these objectives through discussion of basic physics concepts and techniques with note as to their historical context. An understanding of these basic physics facts and principles lays the foundation for future investigations into many areas of modern science and technology. The student is provided the opportunity to strengthen understanding of these concepts by applying them to the solution of many varied situational problems and to investigating them via hands-on laboratory activities. When possible, these problems and activities emphasize the relevance of the concepts to current social or technological issues."

A Textbook and an Activity Book are required for Physics 104. These are available **ONLY** at the University Bookstores at the UniPrint course-packet counter. Textbooks and Activity Books can be ordered in advance for pickup at `uniprint.osu.edu`

A web site Physics 104 can be accessed at `www.physics.ohio-state.edu/104` or by going the OSU Department of Physics web page `www.physics.ohio-state.edu` clicking on "courses" and then selecting "104." Students are encouraged to visit the 104 web site to see course announcements and to view solutions to the written assignments, which appear on the web site approximately one week after each assignment is due.

Midterm I Wednesday, July 20 , 2:30 p.m., Smith Lab, Room 3094.
Covering periods 1-7
Midterm II Wednesday, August 10 , 2:30 p.m., Smith Lab, Room 3094.
Covering periods 8-13
Final Examination , Tuesday, August 23 , 1:30 p.m., Comprehensive

Students with Disability: Please contact your Laboratory Section Instructor at the start of the Quarter so that arrangements can be made to accommodate you. Students needing the services provided by the Office for Disability Services (ODS) will need to be certified by that office. The ODS is located in 150 Pomerene Hall, 1760 Neil Avenue, 292-3307, TDD 292-0901, www.ods.ohio-state.edu/ .

Exam Conflict: Many departments give "common" midterms and final examinations in the evening for courses that meet at various times throughout the day. Any department using common exams must schedule an alternate time for that examination. In the case of a time conflict between a Physics 104 exam and a common exam in another department, you must make arrangements to take that department's common exam at the alternate time. Since alternate times for common exams are typically later in the week, you should plan for this possibility.

ID Requirements at Examinations: You may be requested to provide us with your University Identification during any exam.

Class Attendance: If you cannot attend a Group Meeting at which a video is shown, you may borrow a DVD of the video from the closed reserve desk of the SEL. DVD's may be checked out for two hours. You will need your University Identification card and your own earphones. Hours for the SEL reserve desk: 8:00 am - 11:00 pm every day.

You must be **PRESENT during a Laboratory Section Meeting to receive credit for the homework and activity sheets due during that period. If for one, perhaps two, periods during a quarter you cannot attend your assigned meeting, you may attend any of the other meetings. To obtain credit for attending an alternate meeting, you must turn in the activity sheet and all assignments due to the instructor teaching at that time. That instructor will sign the student's assignments and will forward those materials to your regular instructor. It is your responsibility to check with your Laboratory Section instructor to confirm that he or she has received these materials. Any activity sheet not turned in at the end of the laboratory period during which it was written will not be counted.**

Excused Absences: No points will be given for assignments (activity sheets, homework, or video summaries) that are turned in late except in the case of a documented excused absence. A missed Laboratory Section Meeting or an Examination may be treated as an excused absence under some circumstances. If you miss or know you will miss a Laboratory Section Meeting or an Examination, you may provide timely documentation of the reason for the absence and request an excused absence from your Laboratory Section Meeting instructor.

In the case of an excused absence from a class, ask your instructor for information regarding the possibility of obtaining credit for the missed Laboratory Section Meeting. In the case of an approved excused absence from a Midterm, a grade for that Midterm will be determined based on your grade on the Final Examination. No makeup examinations will be given for missed midterms. In the case of an excused absence from the Final Examination, you will receive an incomplete for the course. A default grade will be assigned unless you request and take a makeup Final Examination following the University rules for Incompletes.

Academic Misconduct: It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see (http://studentaffairs.osu.edu/info.forstucents/csc.asp) for the Code of Student Conduct.

Reading Assignments and Written Assignments:

Reading assignments are given for each period. Unless otherwise noted, the assignments are from the Textbook. They should be read before the class meeting for which they are assigned. The Exercises and Review Questions at the end of each section should also be read and thought about before the class meeting. As noted in the discussion of Written Assignments, written answers are required for two of the Exercises from each period.

Grading policy:

Course policy is that the grades will be based on the two midterms (30 points each), the comprehensive final (45 points), and the Written Assignments (9 points from Exercises, 18 points from Activity Sheets, and 8 points from video descriptions, for a total of 35 points).

Instructors					
Name	**Section**		**Office**	**Phone**	
Bill Davis	**W**	**2:30 pm**	**1106G Smith**	**292-8065**	**davis.30@osu.edu**
Bill Davis	**MF**	**10:30 pm**	**1106G Smith**	**292-8065**	**davis.30@osu.edu**

The following videos will be shown at the Group Meetings:

Group Meeting	**Date**	**Title**
I	**Jun 22**	**V1: Light Speed**
II	**Jun 29**	**V2: Empire of the Air**
III	**Jul 6**	**V3: Cadillac Desert**
IV	**Jul 13**	**V4: Nova: Absolute Zero**
VI	**Jul 27**	**V5: Global Warming**
VII	**Aug 3**	**V6: The Mighty Atom / Nova: Suicide Mission to Chernobyl**
IX	**Aug 17**	**V7: Origins: Back to the Beginning**
X		**V8: Nova: Solar Energy / Saved by the Sun (Not Shown)**

ASSIGNMENT SHEET				
Period/ Chapter	Group Meeting	Sections Meeting M, F	Section Meeting W, R	Reading Assignment
1		Jun 20 M		Introduction to Physics 104
	I	22 W		V1: Light Speed
2		24 F		Electromagnetic Radiation - Radiant Energy I
3		Jun 27 M		Electromagnetic Radiation - Radiant Energy II
	II	29 W		V2: Empire of the Air
4		Jul 1 F		Transfer of Thermal Energy
NC		Jul 4 M		NO Classes
	III	6 W		V3: Cadiliac Desert
5		8 F		Thermal Energy: the Microscopic Picture
6		Jul 11 M		Entropy and the Laws of Thermodynamics
	IV	13 W		V4: Absolute Zero
7		15 F		Applications of the Laws of Thermodynamics
8		Jul 18 M		Chemical Energy
	V	20 W		Midterm I covering periods 1-7, V1-4
9		22 F		Mass and Energy
10		Jul 25 M		Ionizing Radiation I
	VI	27 W		V5: Global Warming
11		39 F		Ionizing Radiation II and Fundamental Particles
12		Aug 1 M		Nuclear Reactions
	VII	3 W		V6: Mighty Atom / Mission to Chernobyl
13		5 F		Astrophysics
14		Aug 8 M		Sensitive Systems and Computer Modeling
	VIII	10 W		Midterm II covering periods 8 - 13, V5-6
15		12 F		Earth as an Energy System
16		Aug 15 M		Consequences of Chemical Energy Use
	IX	17 W		V7: Origins
17		19 F		Consequences of Nuclear Energy Use
18		Aug 22 M		Uses of Solar Energy
NC	X	W		V8: Solar Energy / Saved by the Sun
NC		F		Video 8 is not used Summer Quarter

Final Examination: Tuesday, August 23, 2011, 1:30 p.m. – 3:18 p.m., Location Smith Lab room 3094

NOTE: Early examinations will not be given.