

# Physical Science | Spring 2013

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Course Number: GNSC 1204 Section Number: 201 | Location: Bolin Hall 100

## Days & Times:

- Lecture: MWF 12:00-12:50
- Lab (21A) M 1:00 PM - 2:50 PM
- Lab (21B) M 3:00 PM - 4:50 PM

## Textbooks

Integrated Science, TILLERY, ISBN: 9780073512259

## MSU Faculty Member

Dr. Jonathan D. Price, jonathan.price@mwsu.edu, 940.397.4288

## Lab Teaching Assistant

Ms. Courtney Bartlett, courtney.leabartlett@yahoo.com

## Course Objectives

- Students will learn about the nature of scientific inquiry
- Students will become acquainted with the measurement of motion: velocity and acceleration.
- Students will use motion to understand the nature of forces and energy
- Students will become acquainted with the tools of evaluating energy transfer in a number of manifestations - including light and sound.
- Students will examine the structure of the atom, and how that structure controls ionization and bonding, resulting in periodicity.
- Students will characterize the general nature of chemical reactions, stoichiometric assessment, and energetics
- Students will learn about the nature of water, solutions, and the nature of acids and bases

## Course Expectations

Completion of the course requires that students successfully accumulate a passing score through the following evaluations:

- One midterm hour long in-class examination: 18% of total grade
- One (1) comprehensive final examination: 20% of total grade
- One Science Journal 10% of total grade
- In class participation 7% of total grade
- Laboratory assignments/quizzes: 30% of total grade
- Laboratory midterm: 7% of total grade
- Laboratory final: 8% of total grade

## Grading Standards

This class uses the following numerical equivalents for grades: A = 100-90% | B = 89-80% | C = 79-70% | D = 69-60% | F = 59-0%.

Final Exam 5/8/2013 3:30 PM

## Submission Format Policy

Materials may be submitted in person to your individual lab instructor.

Note: You may not submit a paper for a grade in this class that already has been (or will be) submitted for a grade in another course, unless you obtain the explicit written permission of me and the other instructor involved in advance.

### **Late Paper Policy**

This is a summer class and will require a focused and directed effort on the part of your instructors to complete grading and input grades on a timely manner. As such, late work penalizes the rest of the class. No late work will be accepted.

### **Plagiarism Policy**

Plagiarism is the use of someone else's thoughts, words, ideas, or lines of argument in your own work without appropriate documentation (a parenthetical citation at the end and a listing in "Works Cited")- whether you use that material in a quote, paraphrase, or summary. It is a theft of intellectual property and will not be tolerated, whether intentional or not.

### **Student Honor Creed**

As an MSU Student, I pledge not to lie, cheat, steal, or help anyone else do so."

As students at MSU, we recognize that any great society must be composed of empowered, responsible citizens. We also recognize universities play an important role in helping mold these responsible citizens. We believe students themselves play an important part in developing responsible citizenship by maintaining a community where integrity and honorable character are the norm, not the exception. Thus, We, the Students of Midwestern State University, resolve to uphold the honor of the University by affirming our commitment to complete academic honesty. We resolve not only to be honest but also to hold our peers accountable for complete honesty in all university matters. We consider it dishonest to ask for, give, or receive help in examinations or quizzes, to use any unauthorized material in examinations, or to present, as one's own, work or ideas which are not entirely one's own. We recognize that any instructor has the right to expect that all student work is honest, original work. We accept and acknowledge that responsibility for lying, cheating, stealing, plagiarism, and other forms of academic dishonesty fundamentally rests within each individual student. We expect of ourselves academic integrity, personal professionalism, and ethical character. We appreciate steps taken by University officials to protect the honor of the University against any who would disgrace the MSU student body by violating the spirit of this creed. Written and adopted by the 2002-2003 MSU Student Senate.

### **Students with Disabilities**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Disability Support Services in Room 168 of the Clark Student Center, 397-4140.

### **Safe Zones Statement**

The professor considers this classroom to be a place where you will be treated with respect as a human being - regardless of gender, race, ethnicity, national origin, religious affiliation, sexual orientation, political beliefs, age, or ability. Additionally, diversity of thought is appreciated and encouraged, provided you can agree to disagree. It is the professor's expectation that ALL students consider the classroom a safe environment.

Contacting your Instructor All instructors in the Department have voicemail in their offices and MWSU e-mail addresses. Make sure you add your instructor's phone number and e-mail address to both email and cell phone lists of contacts.

**Attendance Requirements**

Attendance for lecture is required. Please show up early and leave only when excused. Attendance will be evaluated by a randomly-distributed sign-in sheet. It is your responsibility to sign-in each day the sheet is available

Lab attendance is also required for completion of this class. If you fail to attend and complete more than 2 laboratory sessions, you will be either be dropped from the class or you will receive a failing grade.

Absences will only be excused through Dr. Price. Legitimate excuses submitted prior to the lecture or laboratory assignments will be honored; those submitted after an absence will not be accommodated.

Illness is a legitimate excused absence. If you have a fever or are exhibiting symptoms you deem contagious:

email Dr. Price at [jonathan.price@mwsu.edu](mailto:jonathan.price@mwsu.edu) - subject line "ill" is sufficient

go to the health center or personal physician/clinic for evaluation

**Other Policies**

Please note that class schedules and other information will be posted using MSU's D2L system. Students will be required to use this system to participate in the class.

**Writing Proficiency Requirement** All students seeking a Bachelor's degree from Midwestern State University must satisfy a writing proficiency requirement once they've 1) passed English 1113 and English 1123 and 2) earned 60 hours. You may meet this requirement by passing either the Writing Proficiency Exam or English 2113. Please keep in mind that, once you've earned over 90 hours, you lose the opportunity to take the \$25 exam and have no option but to enroll in the three-credit hour course. If you have any questions about the exam, visit the Writing Proficiency Office website at <http://academics.mwsu.edu/wpr>, or call 397-4131.

Physical Science (GNSC 1204)- Topic Schedule for Spring 2013				
Subject	Date	Topic	Text	Lab
<b>Week 1</b>	M	1/14/2013	Intro	<i>No lab</i>
	W	1/16/2013	Science	1
	F	1/18/2013	Science	
<b>Week 2</b>	W	1/23/2013	Time	
	F	1/25/2013	Time	
<b>Week 3</b>	M	1/28/2013	Motion	2 1. Mass and volume
	W	1/30/2013	Motion	
	F	2/1/2013	Motion	
<b>Week 4</b>	M	2/4/2013	Work	3 2. Motion
	W	2/6/2013	Work	
	F	2/8/2013	Work	
<b>Week 5</b>	M	2/11/2013	Energy	3. Centripetal force
	W	2/13/2013	Energy	
	F	2/15/2013	Heat and temperature	4
<b>Week 6</b>	M	2/18/2013	Heat and temperature	4. Work
	W	2/20/2013	Heat and temperature	
	F	2/22/2013	Waves and sound	5
<b>Week 7</b>	M	2/25/2013	Waves and sound	5. Specific heat
	W	2/27/2013	Waves and sound	
	F	3/1/2013	Electricity	6
<b>Week 8</b>	M	3/4/2013	Electricity	6. Magnetism and Electricity
	W	3/6/2013	Electricity	
	F	3/8/2013	<b>Midterm</b>	
<b>Week 9</b>	M	3/18/2013	Light	7 <b>Lab Midterm</b>
	W	3/20/2013	Light	
	F	3/22/2013	Light	
<b>Week 10</b>	M	3/25/2013	Modern Physics	7. Conductivity
	W	3/27/2013	Modern Physics	
<b>Week 11</b>	M	4/1/2013	Atoms	8 8. Qualitative Analysis
	W	4/3/2013	Atoms	7
	F	4/5/2013	Atoms	7
<b>Week 12</b>	M	4/8/2013	Periods	9. Acids and bases
	W	4/10/2013	Periods	
	F	4/12/2013	Periods	
<b>Week 13</b>	M	4/15/2013	Chemical Reactions	9 10. Titration
	W	4/17/2013	Chemical Reactions	
	F	4/19/2013	Chemical Reactions	
<b>Week 14</b>	M	4/22/2013	Water and Solutions	10 11. Indicator
	W	4/24/2013	Water and Solutions	
	F	4/26/2013	Water and Solutions	
<b>Week 15</b>	M	4/29/2013	Material Properties	<b>Lab Final</b>
	W	5/1/2013	Nuclear Reactions	11
	F	5/3/2013	Universe	12
		<b>5/8/2013</b>	<b>Final Exam - 3:30PM</b>	