PHSC-1104 Syllabus

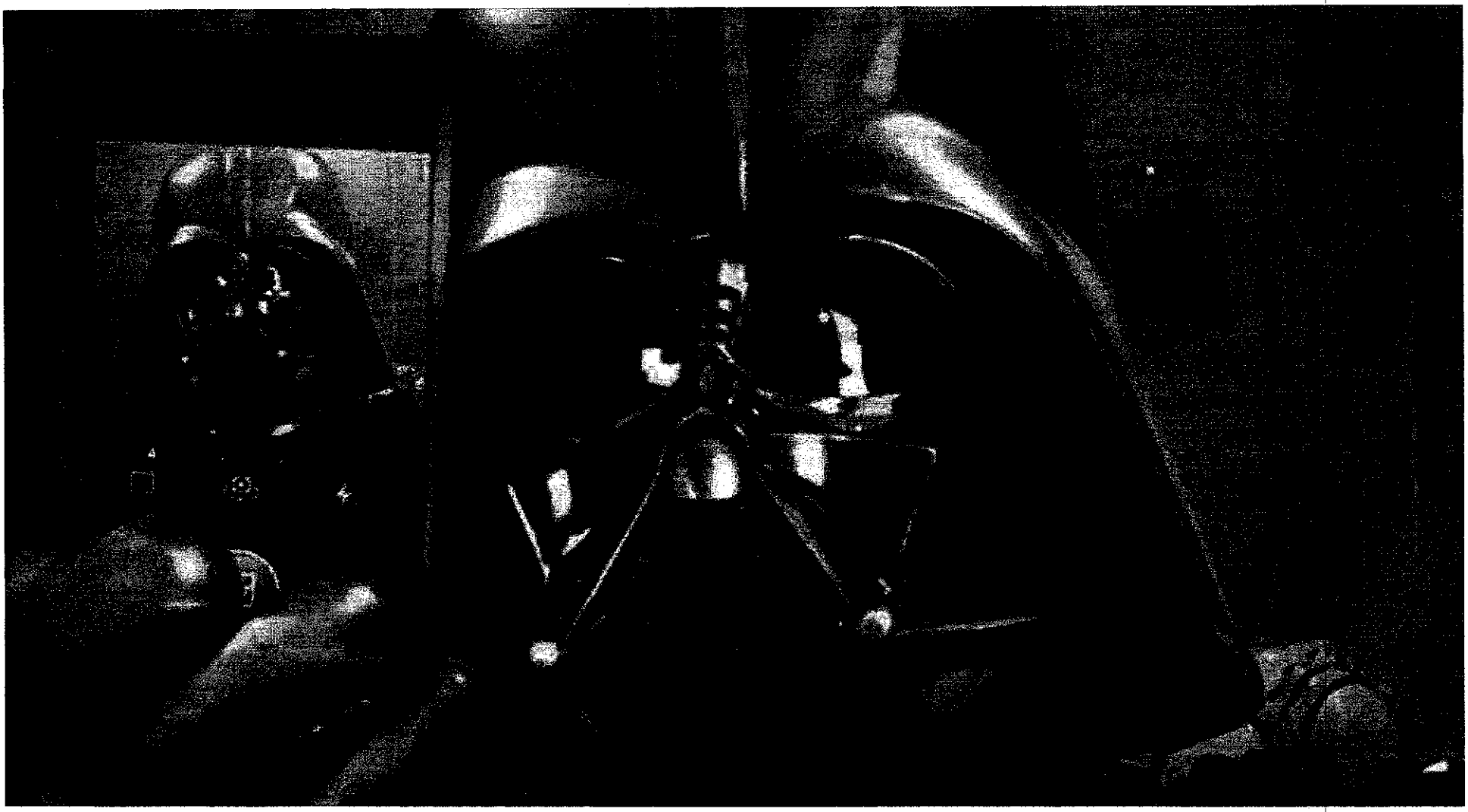
Spring 2015

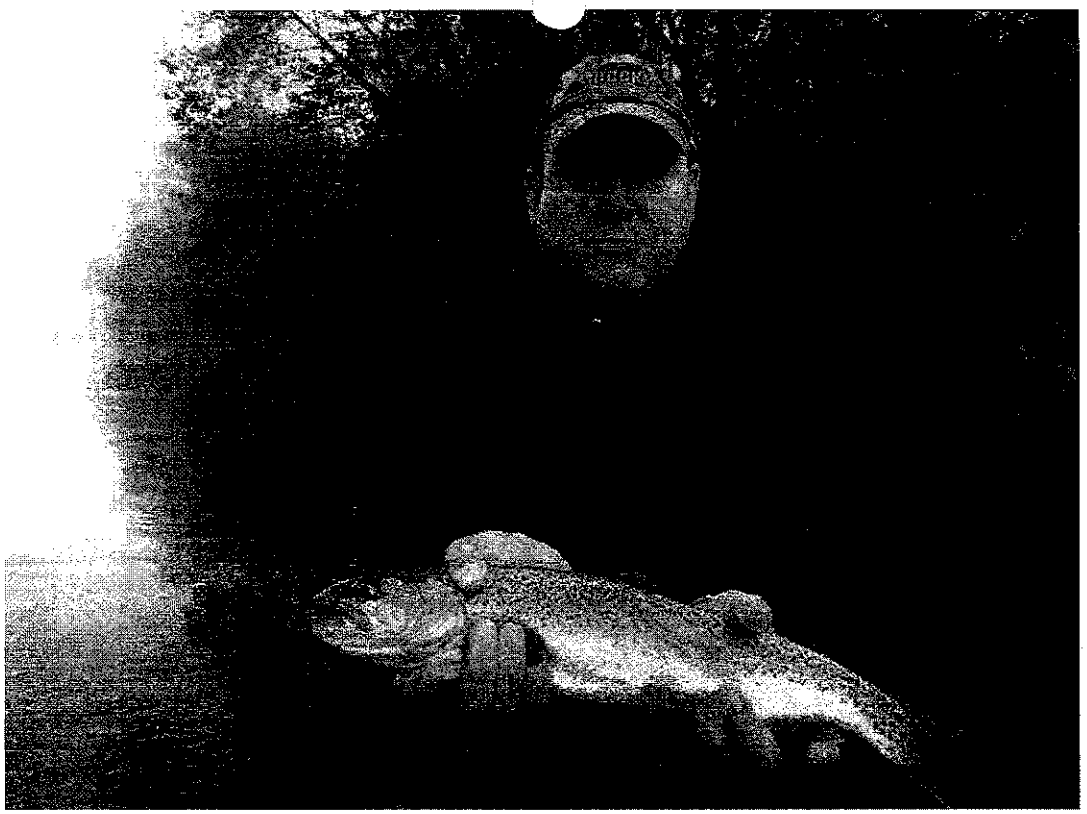
Lindsey Wilson College

Columbia, Ky

Dr. Kalvin Gregory

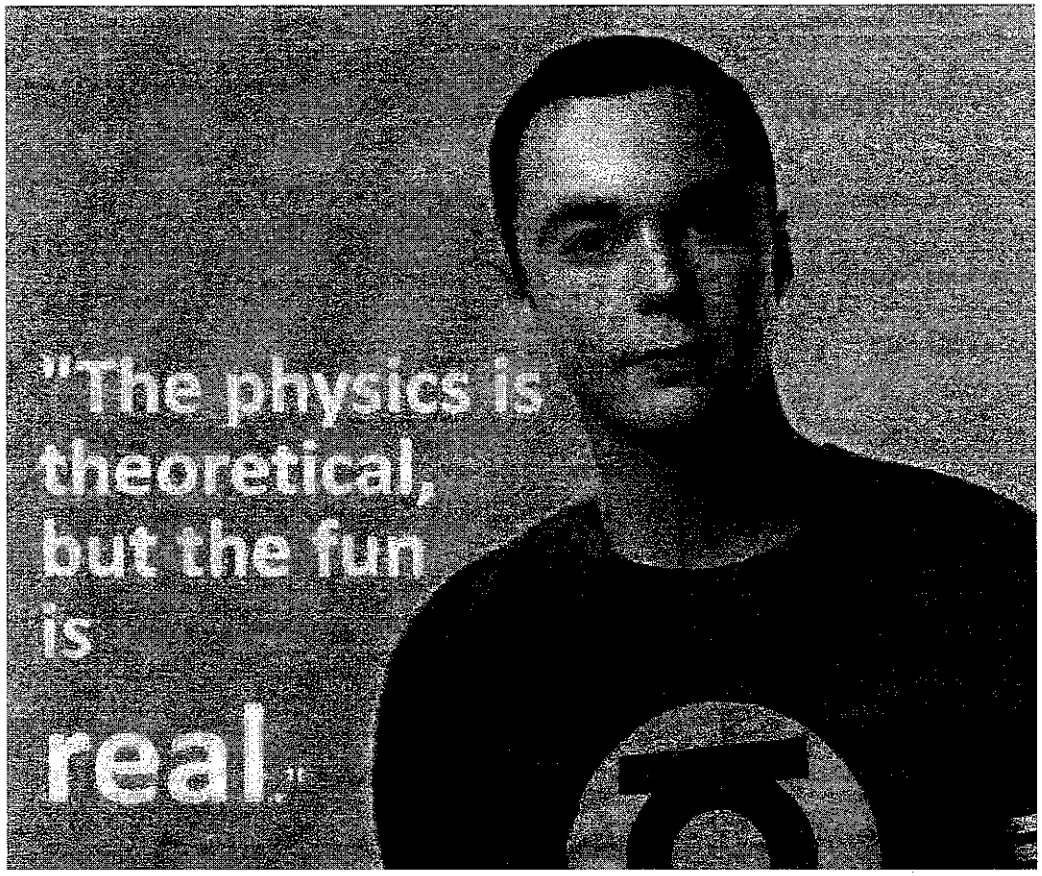
About your professor.....





Tall. Ruggedly handsome. A confirmed misanthropist, he occasionally enjoys pretending to run for his life in crowded places. Champion hog caller, Yell County, South Dakota 1988. Winner of the 10th annual Donnie Osmond look-alike contest, Buzzard's Toe, Ky, 1995. During a brief stint as an ambulance driver, he gained notoriety by teaching himself to play "Yankee Doodle" on the soprano ambulance siren. Holds a 10th degree black belt in infuriation. As a provocateur, he regards himself a professional. His sarcasm has been known to kill small birds in mid-flight at 100 yards. Loves extension cords. Is not allergic to shellfish. Fly fishes WAY too much. Currently holds the world's record for the most split infinitives used in one evening's conversation. So self-effacing, he is considered a public nuisance in five states. Righter of wrongs. Writer of songs. Chief Lunatic of the Duchy of Northumberland, and Harbinger of the Doomed Rat of Sudbury. Manufacturer of quality footwear.

Contact Information

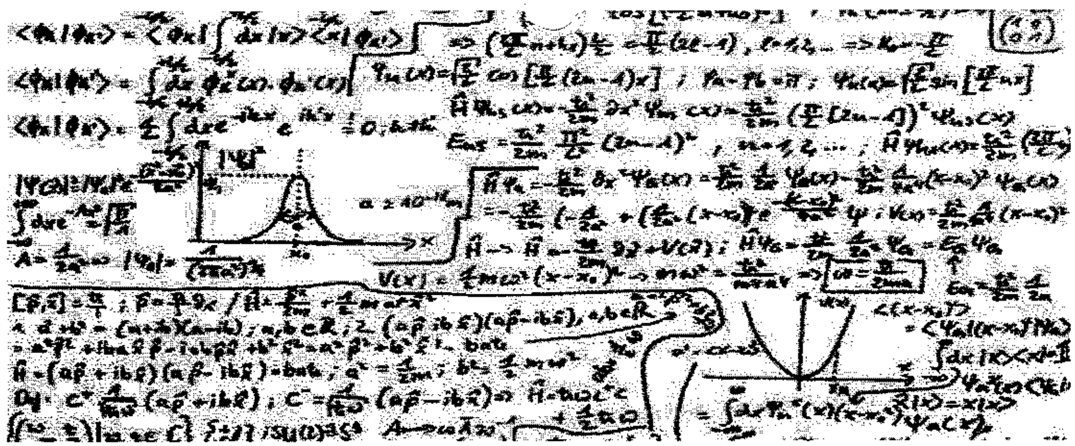


Office: 330 Fugitte

Office Hours: Posted on Blackboard or by appointment and commonly by walk-ins.

Also use email gregoryk@lindsey.edu for most communication. Ph = 270-384-7462

ALL COMMUNICATIONS FOR THIS COURSE WILL BE THROUGH YOUR LWC CAMPUS EMAIL!

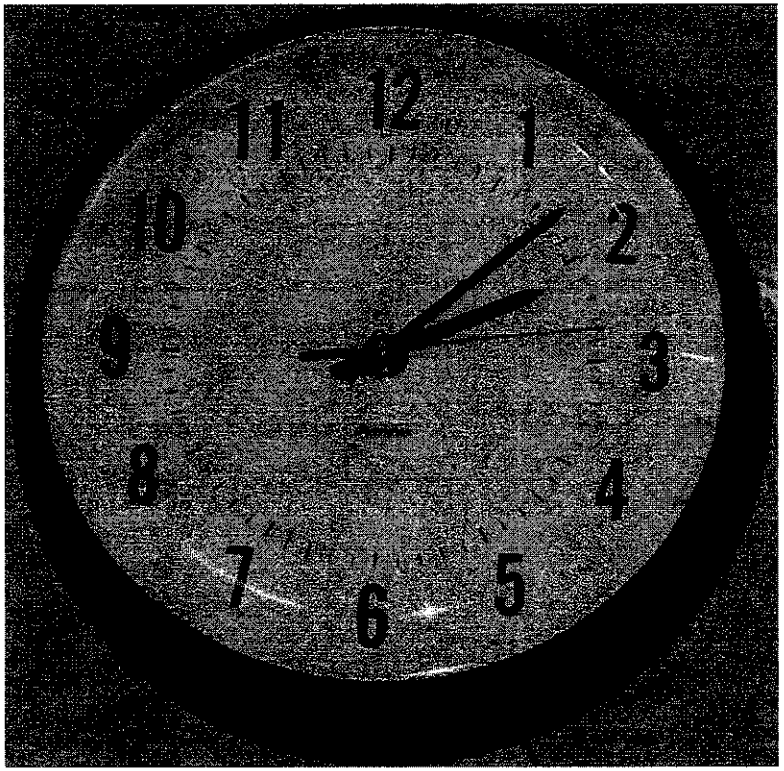


Intro Physical Science W/Lab (4 credits) LWC
30298 CRN (M-02) Spring 2015

A 3 credit lecture format course with 1 added experiential/practical lab credit for a total of 4 credits.

Course Description: An introduction to the physical science disciplines of physics and chemistry. Specific topics include physical units, motion, force, energy, heat and thermodynamics, waves, electricity and magnetism, optics, atomic and nuclear physics, the periodic table, the chemical elements, chemical bonding, chemical equations, and simple stoichiometry. A one-hour laboratory series is included which correlates with the concepts of Introduction to Physical Science.
Prerequisites: MATH 0923 or ACT Mathematics score of 20 or higher or an Accuplacer Algebra score of 53-120 and/or an Accuplacer college-level mathematics score of 44-85. Course rotation: Varies.

Class times

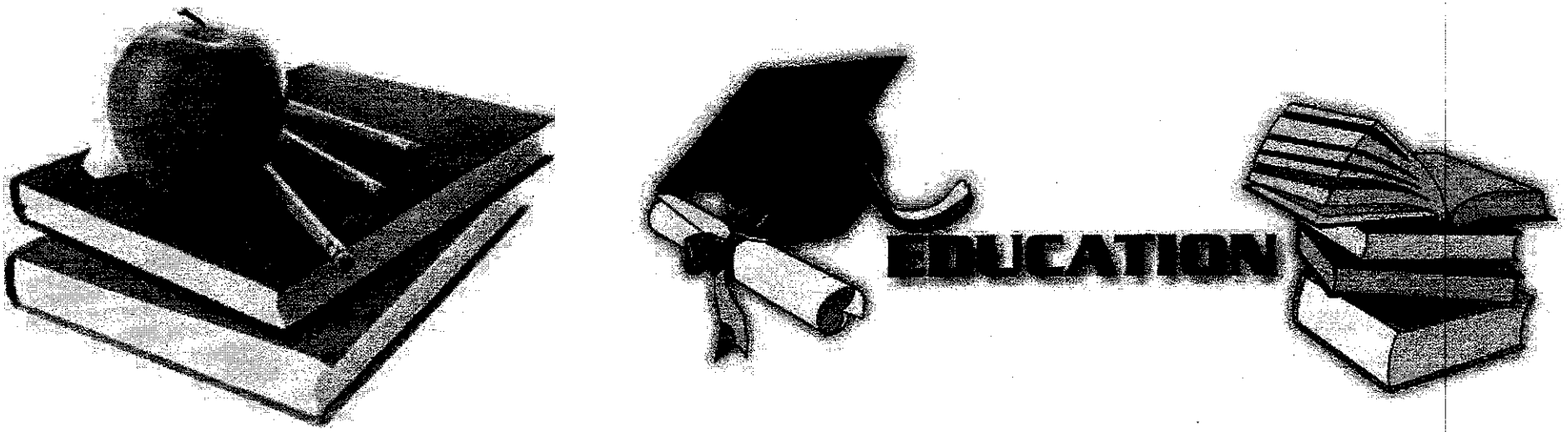


Lecture

M-01 MWF 11:30 a.m.-12:20 p.m. Fugitte 214

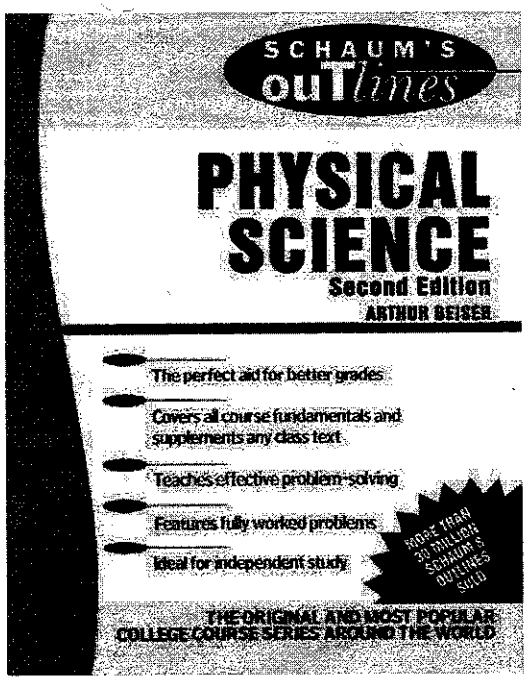
Lab

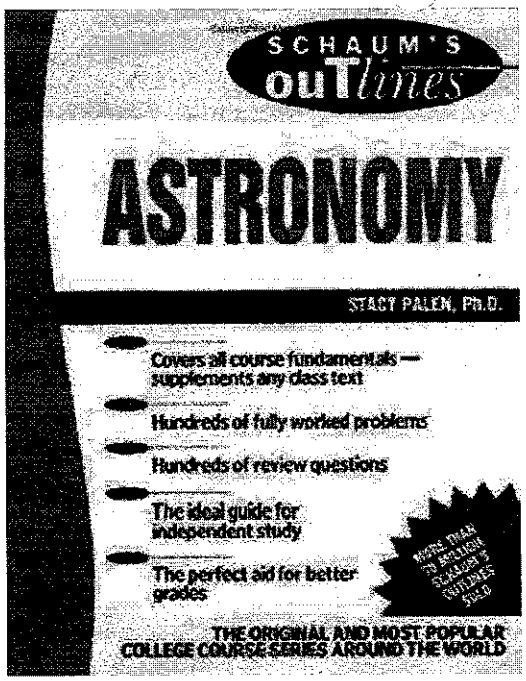
M-01 R 2:00 p.m.-3:50 p.m. Fugitte 214

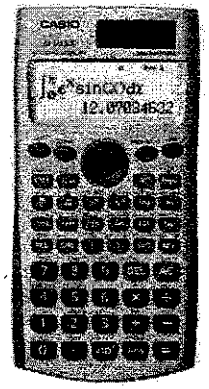


Education Program Preparation:

This course is required for content preparation in the Middle Grades Education Program, and prepares teacher candidates with the knowledge base required in the Kentucky Core Academic Standards and the College Career Readiness Standards. The Conceptual Framework of the Education Program, "Teacher as Leader for the 21st Century", is incorporated. The Division of Natural and Behavioral Sciences works with the Education Program in preparing the teacher candidates with the knowledge base required to meet Kentucky Teacher Standard I and the Education Program Student Learning Outcome for Content Knowledge. Teacher candidates will be equipped to teach K-12 students and meet requirements for Unbridled Learning.







Required Texts

1. Schaum's Outline of Physical Science (Schaum's) 2nd edition by Arthur Beiser

ISBN-13: 978-0070044197 ISBN-10: 0070044198 Edition: 2nd

2. Schaum's Outline of Astronomy (Schaum's) 1st edition by Stacy Palen

ISBN-13: 063-9785326694 ISBN-10: 0071364366

Required Equipment

You will need a non-programmable scientific calculator.

NO CELL PHONE CALCULATORS ARE ALLOWED ON EXAMS!

GOALS & OBJECTIVES

This course will cover the topics listed in the tentative lecture/reading and exam schedule included later on in this document. The textbook for the course will be used as a *companion* to my lectures, as well as a source of practice problems for preparation for the exams. Therefore, attendance to lectures is necessary for success in this course***. I reserve the right to add or delete topics from the course, or to slightly change the timeline given in the tentative lecture and exam schedule. Sometimes things happen, and adjustments have to be made.***

STUDENT LEARNING OUTCOMES (SLO's) for this course.

Program SLO's:

Why is physical science important? What should I get out of this class?

1	To understand the concepts of physical science, which is a required subject area in middle school/high school education.
	• This class surveys a broad scope of topics relevant to the eduaction program. The understanding gained from this course should provide a thorough foundation for education students.
2	To observe physical phenomena in a laboratory environment and to solve problems.
	• Students will develop a feel for how science is done in the real world, which differs markedly from what is typically done in a lecture-only course.
3	To learn how to apply the scientific method to problems and projects in physical science.
	• Understand these concepts well enough to apply them in a real-world scenario, where every day will seem like a final cumulative exam.
4	To learn how to communicate effectively using scientific language.

The Grading Scale

Your final grade will be determined (on a 100 point scale) as follows:

Final Exam : 30 %

Regular Exams (X8): 30 %

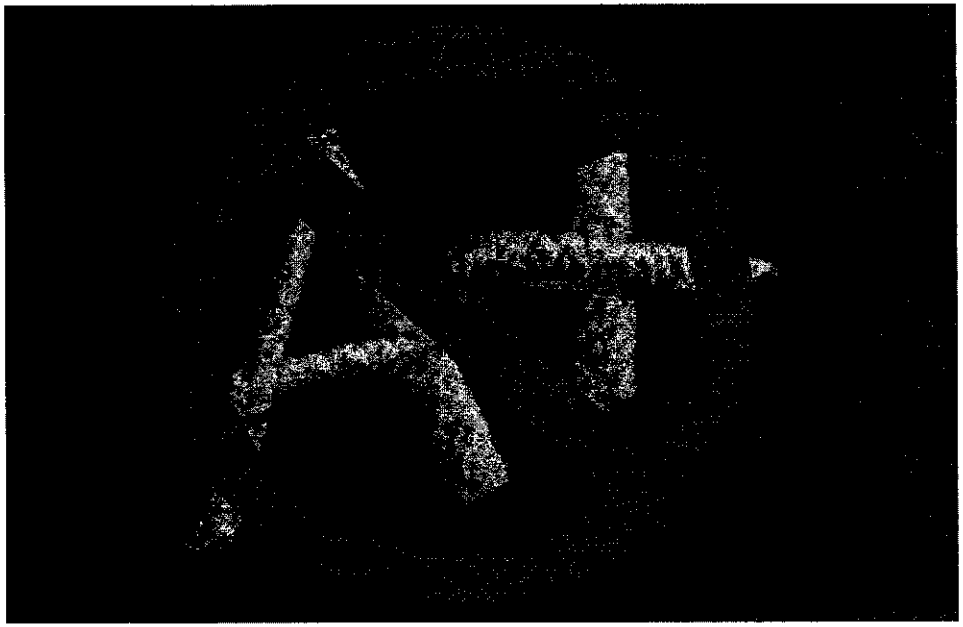
Lab: 20%

In-class work: 10%

Homework: 10%

Note: Your exam average will be calculated using your *best five exam scores*. However, you must take all eight exams. If you fail to take one or more exams, you will be given a zero for the exam(s) you missed, and the zero(s) will count toward your exam average.

Letter Grades

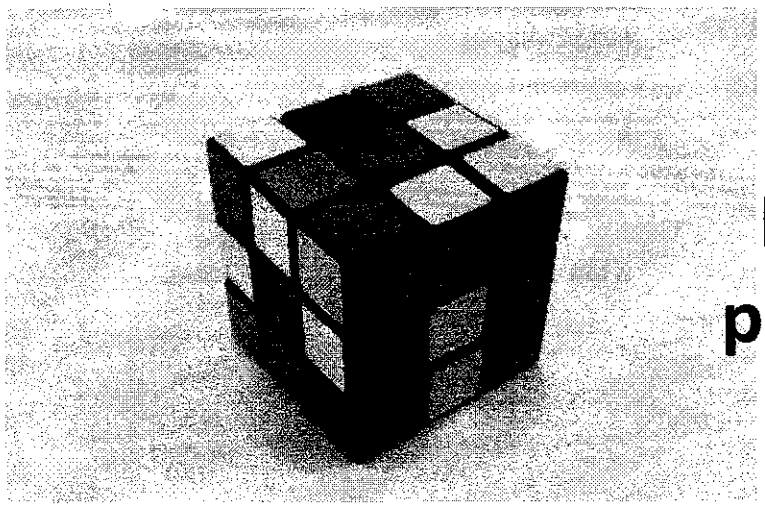


Composite score	Letter Grade
95 – 100	A
90-94.99	A-
88 – 89.99	B+
83 - 87.99	B
80 - 82.99	B-
78 – 79.99	C+
70 – 77.99	C-
60- 69.99	D
0 – 59.99	F

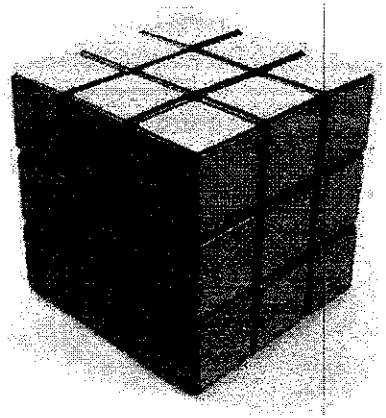
How I will report your grades:

I will be reporting mid-term and end-semester grades using the +/- system , however, for the rest of the semester, this system will not be used in reporting your grades. ***I reserve the right to adjust class exam scores and final scores (i.e. curving) at my discretion.*** This may or may not happen, but whatever the outcome, it is not negotiable. If you have any controversy with your grades, please bring them to my attention as soon as possible. Waiting weeks or until the very end of the semester will be very unlikely to elicit my sympathy.

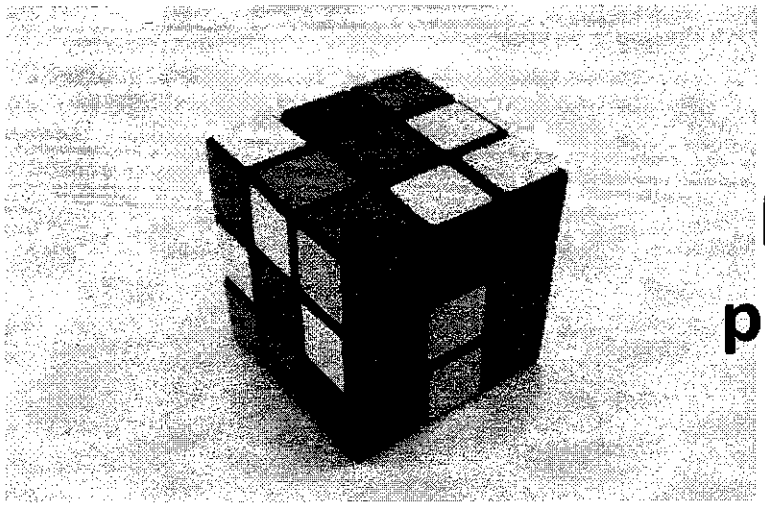
If you are struggling, please see me in my office, and consider assistance via tutoring at the Academic Success Center.



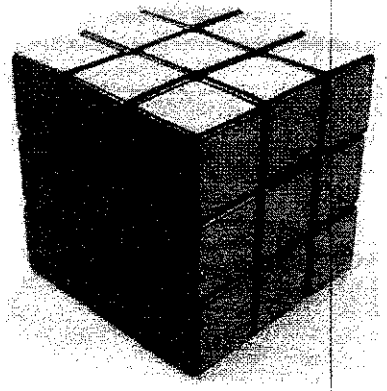
Problems and problem solving



This course will emphasize problem solving skills. The "In-class" portion of your grade will be based on your performance on problems that I will assign you to do as a group during class. All I ask is that you come into a problem solving session reasonably well-prepared and take what you are doing seriously, and I will give you full credit.

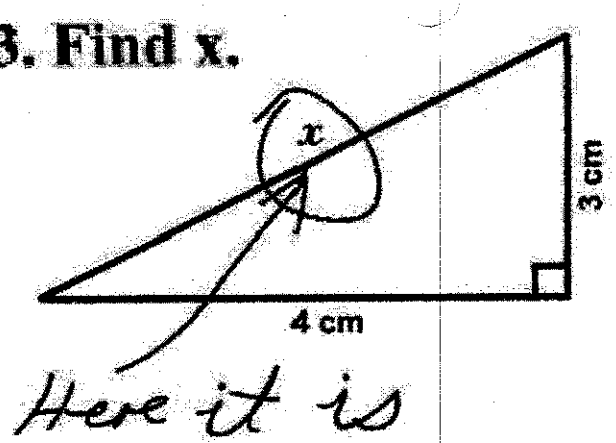


Problems and problem solving



I will also assign homework problems to be done on your own. Homework assignments will be given when I feel a sufficient block of material has been adequately covered, and you have had the opportunity to work some problems in class.

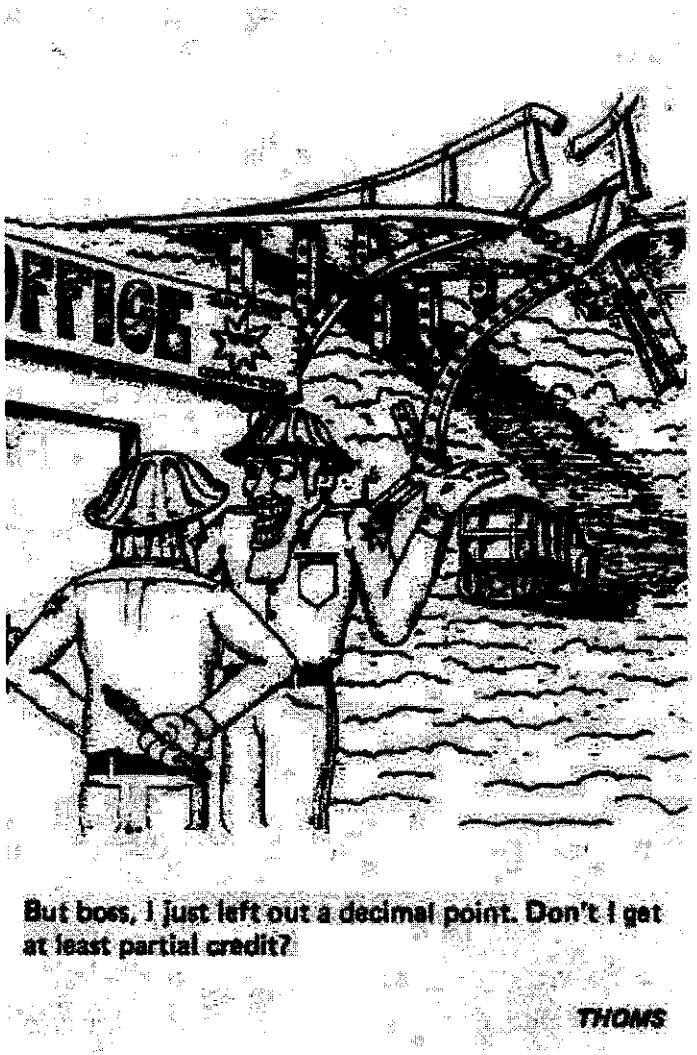
Exams are coming!!!



Exams and Exam Formats

The exams may consist of multiple choice or short answer questions/problems. When writing your answers or working through any problems, please **WRITE CLEARLY** and **SHOW ALL OF YOUR WORK**. If I can't read it or understand your train of thought, I cannot give you full credit. When writing a numerical answer (answer to a problem), please include the units with the answer, and circle or underline or draw a rectangle around the numerical answer. In other words, make sure that I can readily locate the answer. It is in your best interest to present your work in the neatest, most detailed, and easily understandable way as possible.

Partial credit will be given, but it is NOT negotiable!



Partial credit on numerical problems

a. Subdivided problems: Subdivided problems are problems which have a part a), b), c), etc. I will grade these sections separately from one another. What this means is that, if you make a mistake on one part, I *may* award partial credit for the total point value of *that* part of the problem. So, if a 10 point problem has four parts, each part is worth 2.5 points. If you make a mistake on part a), I may award you partial credit on *that part*. For example, if I award you 90% credit on part a), you will receive 2.25 points. This will not affect the other parts of the problem. ***Therefore, I will not penalize you for any propagated errors.*** If you make a mistake on part a), I will penalize you. However, if you must use the answer to part a) in subsequent parts, I will not penalize you any further, provided that you do not make any more mistakes.

Obvious calculator errors: This happens frequently, because many students spend ridiculous sums of money on very powerful calculators, but are still unable to enter five numbers and get the correct answer. A typical example would be as follows:

$$PV = nRT$$

$$n = \frac{PV}{RT} = \frac{(1.5\ atm)(2.5\ L)}{\left(0.0821\ \frac{L \cdot atm}{mol \cdot K}\right)(298\ K)}$$

$$n = 0.10\ moles$$

In this case, the problem is set-up correctly, but the final answer is incorrect. This can only be due to the fact that the student failed to enter all the numerical values, failed to carry out the correct order of operations, or both. For mistakes such as this, I will award 90% of the total point value, because the student obviously knew what they were doing, but somehow fumbled on the calculator. **This is why it is always a good idea to show *ALL* of your work explicitly.**

Other errors: The partial credit you receive will be at my discretion, and ***it is non-negotiable.***

Note: For numerical answers on lab write-up problems, partial credit will not be awarded except in the case of a calculator error.

d. Failing to show your work and/or failing to show the correct units: In the example above, all of the units are shown in the calculation. This is the correct way to show your work on an exam. ***Shown below is the incorrect way:***

$$n = \frac{PV}{RT} = \frac{(1.5)(2.5)}{(0.0821)(298)}$$

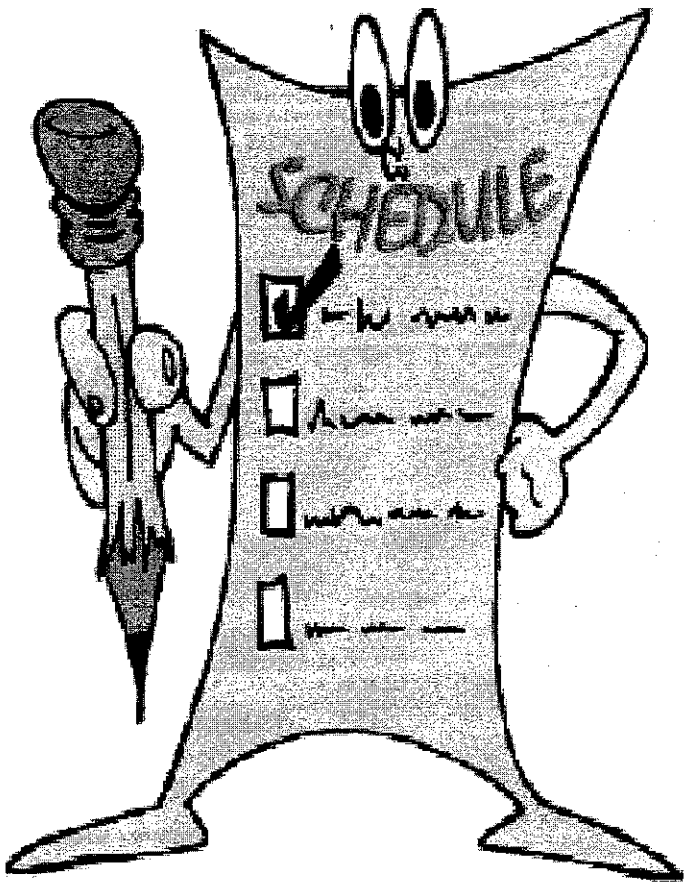
$$n = 0.15$$

This time, the student got the answer right, but did not show the units. **Failing to include the units will result in a penalty of 10% of the total point value for the problem. Failing to show any work at all will result in a separate 10% penalty. This rule holds lab write-up problems as well.**

Do not let me catch you cheating on your exam! At a minimum, you will be given a zero for that exam, and I will also inform the Academic Affairs Office.

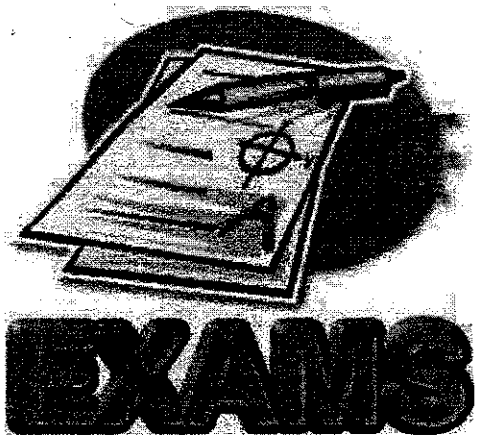
Do not let me see your cell phone out during an exam. I will assume that you are cheating, and yes, I have caught several people doing this, and yes *they paid for it dearly*. SO JUST DON'T!

Tentative class schedule: (Note: Stuff happens, so any and all of these dates are subject to change)



Jan 14, 16- Motion in a Straight Line
Jan 21, 23- Laws of Motion
Jan 26, 28- Circular Motion and Gravitation
Jan 30, Feb 2- Energy
Feb 4, 6- Momentum
Feb 9, 11- Relativity
Feb 13, 16- Fluids
Feb 18, 20- Heat
Feb 23, 25- Thermodynamics
Feb 27, Mar 2- Electricity
Mar 4, 6- Electric Current
Mar 16, 18- Magnetism
Mar 20, 23- Electromagnetic induction
Mar 25, 27- Waves
Mar 30, Apr 1- Lenses
Apr 6, 8- Quantum Physics
Apr 10, 13- The Nucleus
Apr 15, 17: Radioactivity and Elementary Particles
Apr 20, 22, 23, 27, 29, May 1 - TBA

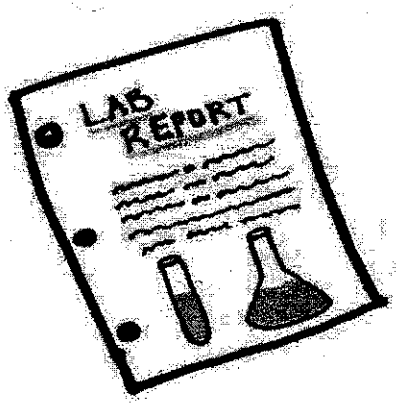
Please note: I reserve the right to add or drop topics from the schedule pretty much whenever I feel like it.



Schedule of exams:

Exam # 1	**Jan 29, 2015**
Exam # 2	**Feb 12, 2015**
Exam # 3	**Feb 26, 2015**
Exam # 4	**Mar 19, 2015**
Exam # 5	**Apr 2, 2015**
Exam # 6	**Apr 16, 2015**
Exam # 7	**Apr 30, 2015**
Final Exam	**TBA**

The Laboratory



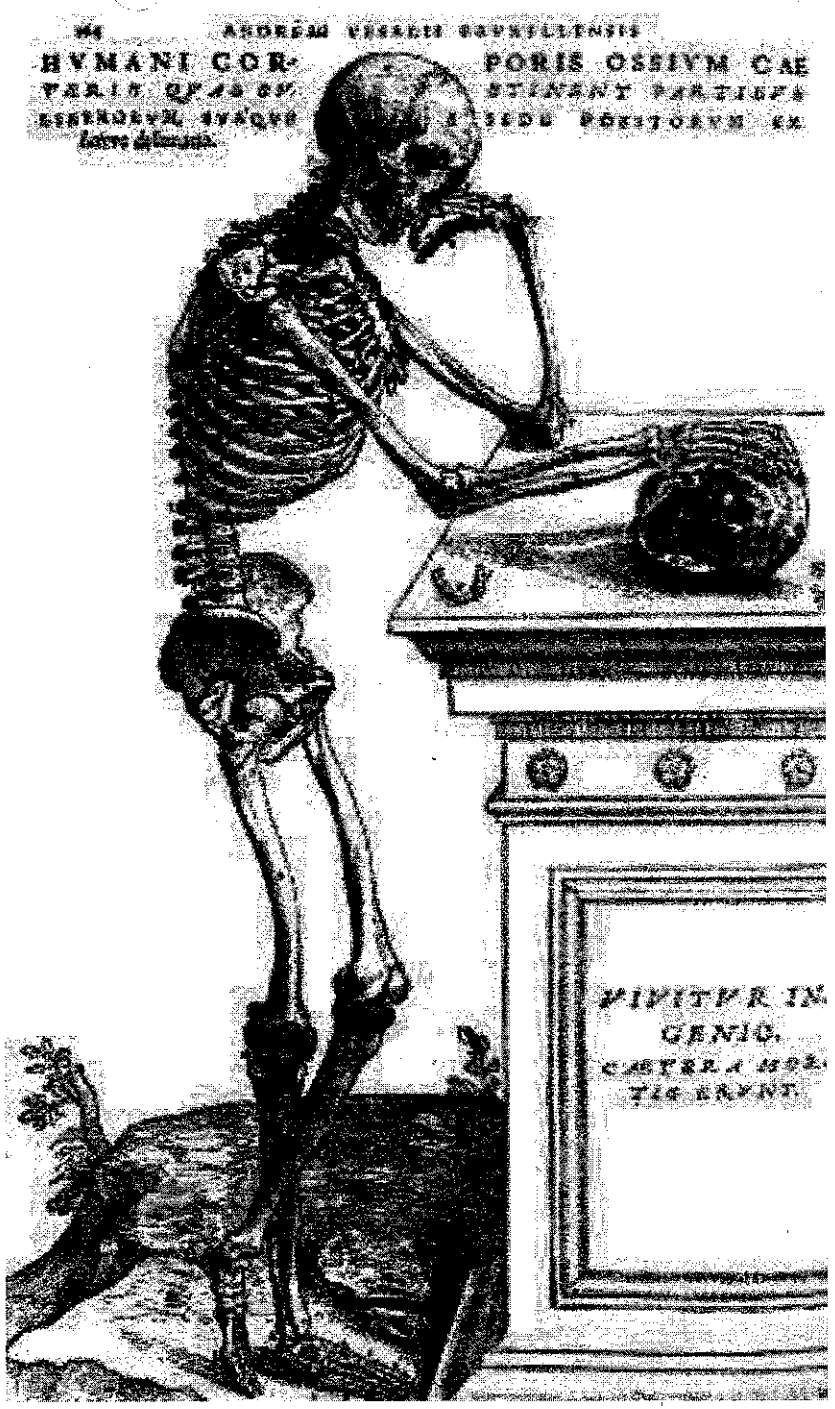
Lab Write-Ups

Your lab write-ups will consist of whatever questions/problems/graphs, etc that are assigned in the lab handouts.

All lab handouts will be provided for you on Blackboard in the lab folder

Due Dates For Lab Write-ups

Write-ups will be due at the end of the day, one week from the day you did the lab.



Tentative Lab Schedule:

Jan 22: TBA

Feb 5: TBA

Feb 19: TBA

Mar 5: TBA

Mar 26: TBA

Apr 2: TBA

Apr 9: TBA

Apr 23: TBA

Make-up Exam Policies

You may make up an exam *with my permission* 1-3 days *before* the scheduled exam. My decision whether or not to allow this will not be influenced by any so-called valid excuses. It is solely at my discretion, and it is not negotiable.

You may also make up an exam 1-3 days *after* the scheduled exam (once again, at my sole discretion, which will not be influenced by excuses). This exam will be an alternative theoretical essay exam, and I strongly recommend against you pursuing this route, because the exam will be *extremely gruesome.*

Outside of this time frame, I will not allow a make-up exam.

Exceptions to the Exam Make-up Policies:

If you are an athlete who has to be away for a game, you may take one of the options mentioned on the previous page, OR you may do the following:

1. Have your coach contact me
2. I will provide him/her with a copy of the exam and a fax number
3. He/she will administer the exam *on the day it is scheduled*.
4. He/she will then fax your exam to me.

Lab Make-up Policy:

1. Labs will be made up with my permission, and NO excuses will be considered.
2. You will be allowed to make up *only* one lab.
3. Exception: Athletes who have to miss more than one lab due to games may make them up. Your coach must provide notification of your absence.

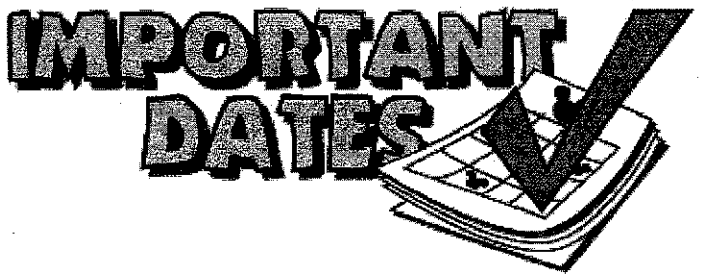
Some things that can get you into trouble

- Failure to attend class/chronic tardiness
- Texting/use of cell phone during class
- Talking during class to the extent that I have to bring it to the attention of the entire class
- Doing any work/studying during class that has nothing to do with this class
- Insubordination

Consequences:

I will basically be an ice-pick in your advisor's (and/or coach's) ear as long as the behavior persists

If the behavior continues long enough, at my discretion, I will take you to Academic Affairs



Jan 19: Martin Luther King Day (No Class)

Jan 20: Last day to register or add a day class

Mar 9-13: Spring Break

Apr 3: Good Friday (No Class)

Apr 6: Last day to drop or withdraw from a day class

May 1: Last day of class

May 4-8: Finals week

Disclaimer

Any and all dates mentioned in this syllabus are subject to change!

LINDSEY WILSON COLLEGE STATEMENTS FOR INCLUSION IN THE SYLLABUS 2014-2015

Academic Integrity

Academic integrity is essential to the existence of an academic community. Every student is responsible for fostering a culture of academic honesty, and for maintaining the integrity and academic reputation of Lindsey Wilson College. Maintaining a culture that supports learning and growth requires that each student make a commitment to the fundamental academic values: honesty, integrity, responsibility, trust, respect for self and others, fairness and justice.

To foster commitment to academic integrity, faculty are asked to require each student to place and sign the following Honor Code on tests, exams and other assignments as appropriate: **On my honor as a student, I have neither given nor received any unauthorized aid on this assignment/exam.**

Violations of the academic integrity policy include cheating, plagiarism or lying about academic matters. Plagiarism is defined as any use of another writer's words, concepts, or sequence of ideas without acknowledging that writer by the use of proper documentation. Not only the direct quotation of another writer's words, but also any paraphrase or summary of another writer's concepts or ideas without documentation is plagiarizing that writer's materials. Academic dishonesty is a profoundly serious offense because it involved an act of fraud that jeopardizes genuine efforts by faculty and students to teach and learn together. It is not tolerated at Lindsey Wilson College.

Students who are determined to have plagiarized an assignment or otherwise cheated in their academic work or examinations may expect an "F" for the activity in question or an "F" for the course, at the discretion of the instructor. All incidents of cheating or plagiarism are reported by the instructor to the Academic Affairs Office along with copies of all relevant materials. Each instance of cheating or plagiarism is counted separately. A student who cheats or plagiarizes in two assignments or tests during the same semester will be deemed guilty of two offenses. If the evidence is unclear, or if a second offense occurs, the VP for Academic Affairs or Associate Dean will work in cooperation with the Dean of Students to move the student before the campus Judicial Board for review. Violations will ordinarily result in disciplinary suspension or expulsion from the College, depending on the severity of the violation involved. **Note:** The College has purchased Turnitin.com, a web product used to detect plagiarized documents.

Questioning a Grade -- The Student Academic Complaint Policy

A student, who wishes to question **an assignment grade, or other academic issue**, should follow the procedure below:

1. Whenever possible, the student will first go to the faculty member who has assigned the disputed grade. Complaints regarding grades should be made within seven (7) days of receipt of the disputed grade and, if possible, will be decided by the faculty member within seven (7) days of receipt. If the disputed grade is the final grade for the course, "receipt" is defined by when the final grade is posted online by the registrar. (Please refer to the next section for appealing a final grade.)
2. Unless there are extenuating circumstances, the student may, within seven (7) days request in writing a review of such decision by the Chair of the division in which the grade was assigned. Upon receipt of such request, that Chair will direct the faculty member and the student to each submit, within seven (7) days, if possible, a written account of the incident, providing specific information as to the nature of the dispute.
3. Upon receipt of these written accounts, the Chair will meet, if possible, within seven (7) days with the faculty member and the student in an effort to resolve the dispute and will render his or her decision in writing.
4. If either the student or the faculty member desires to appeal the decision of the Division Chair, the student or faculty member may, within seven (7) days by written request to the chair, ask that the matter be reviewed by a Grade Appeals Panel convened by the Academic Affairs Office.
5. If the disputed grade is assigned at the end of a fall or spring semester and the student and faculty member cannot meet to resolve the issue, the student should contact the faculty member by e-mail within seven (7) days of receipt of the disputed grade. If the issue cannot be resolved by e-mail within the time limit, steps 2, 3 and 4 of the appeal may extend into the beginning of the semester immediately following receipt of the disputed grade by following the timeline above.

A student who wishes to question a **final grade** should follow the procedure below:

1. Confer with the faculty member who assigned the disputed grade.
2. If the disputed grade cannot be resolved, a written request for a grade appeal must be submitted to the Academic Affairs Office before the first day of the semester following the one in which the grade was issued. The written request must include the specific basis for the appeal.
3. The Academic Affairs Office will convene a Grade Appeals Panel, comprised of the Vice President for Academic Affairs, the Associate Academic Dean, and the chair of the academic unit which houses the course for which the grade is appealed. If one of the members is the faculty member who issued the grade, an alternate will be appointed. The student and the faculty member may appear separately before the panel to explain their positions. The hearing is non-adversarial. Neither the faculty member nor the student may be accompanied by other individuals to the meeting of the Grade Appeals Panel. The Grade Appeals Panel will notify the student of its decision, if possible, within seven (7) days of the meeting.

Policy for Verification of Student Identity and Protection of Privacy

In compliance with United States Federal Higher Education Opportunity Act (HEOA), Public Law 110-315, all credit-bearing courses and programs offered through distance learning methods must verify that the student who registers for a distance education course or program is the same student who participates in and completes the course or program and receives academic credit. One or more of the following methods must be used:

a) A secure login and pass code;
b) Proctored examinations; and/or
c) Remote proctoring of one of more examinations using Tegrity or other technologies

Verification of student identity in distance learning must protect the privacy of student information. Personally identifiable information collected by the College may be used, at the discretion of the institution, as the basis for identity verification. For instance, a student requesting that their learning system password be reset may be asked to provide two or more pieces of information for comparison with data on file. It is a violation of College policy for a student to give his or her password to another student.

Detailed information on privacy may be located at:
http://www.lindsey.edu/media/319883/Online%20Services%20Privacy%20Policy%204.20.12.pdf

Institutional Review Board (IRB) Policies

The Lindsey Wilson College Institutional Review Board (IRB) safeguards the rights and welfare of human participants in research and other research activities. Lindsey Wilson College faculty, staff, and students, which comprise its academic unites, and facilities, are subject to the IRB policies. This includes any research for which a research agreement (e.g. MOU) identifies Lindsey Wilson College Institutional Review Board (IRB) as the IRB of record. All student-led human subject research mush have a LWC faculty sponsor. All faculty members and students conducting human subject research are required to submit documentation of training on research involving human subjects that has been completed within two years of the onset of the proposed research. Online training is available at http://php.nihtraining.com/users/login.php.

Statement on Learning/Physical Disabilities

Lindsey Wilson College accepts students with learning disabilities and provides reasonable accommodation to help them be successful. Depending on the nature of the disability, some students may need to take a lighter course load and may need more than four years to graduate. Students needing accommodation should apply as early as possible, usually before May 15. Immediately after acceptance, students need to identify and document the nature of their disabilities. It is the responsibility of the student to provide to the College appropriate materials documenting the learning disability, usually a recent high school Individualized Education Program (IEP) and results from testing done by a psychologist, psychiatrist, or qualified, licensed person. The College does not provide assessment services for students who may be learning disabled. Although LWC provides limited personal counseling for all students, the College does not have structured programs available for students with emotional or behavioral disabilities. For more information, call Ben Martin at 270-384-7479.

Academic Success Center

The Academic Success Center, located in the Everett Building, offers peer tutoring to aid students in completing class assignments, preparing for exams and improving their understanding of content covered in a particular course. In addition, computers are available for student use.

Students are encouraged to utilize this Center as a resource for improving study strategies and reading techniques. The Center also offers assistance with other academic problems resulting from documented learning disabilities. All services are free of charge to all Lindsey Wilson College students (students with learning disabilities are responsible for providing documentation from an appropriate outside professional source such as a professional evaluation or school IEP). Please contact Maretta Garner, Tutor Coordinator at 384-8037 for further information and assistance.

Writing Center and Mathematics Center

The Writing Center (located in the Slider Humanities & Fine Arts Building), and the Mathematics Center (located in the Fugitte Science Building) are available for specialized tutoring at no charge to students. Please contact Jared Odd, Writing Center Coordinator, at 384-8209 or Linda Kessler, Math Tutor Coordinator, at 384-8115 for further information and assistance.

Final Exams

Final Exams for day classes are scheduled for the Fall 2014 semester on **December 8-12 and May 4-8** for the Spring 2015 semester. The academic calendar, which contains the schedule for finals, is in the College Catalog and course schedule listing. Please make any necessary flight arrangements **after** the final exam week. **Students will not be permitted to take early finals** unless extenuating circumstances exist. "Extenuating circumstance" means illness, a verified family emergency or participation in officially sponsored travel in support of an event arranged by the College. **Travel arrangements must be made in sufficient time** that tickets may be obtained after final exams and the semester is officially over. All requests for early finals must be made in person to the Academic Affairs Office.

Email Policy

All Lindsey Wilson College students are required to communicate with LWC faculty and staff via LWC (Lindsey.edu) email addresses only. Alternative email addresses should not be used when communicating with LWC faculty and staff.

Cell Phone Policy

Student cell phones will be off during class time unless prior arrangement is made with the instructor.

Adding/Dropping a Course

Students enrolled in the following courses cannot drop these classes during the semester: READ 0713, 0723, 0733, 0903, 1013 and 1023; STSK 1003; ENGL 0903 and 0904; and ESL 0803, 0804 and 0854.

For undergraduate classes at the Columbia campus, adding a course, dropping a course, or changing from one section of a course to another section of the same course requires the approval of the advisor and the instructor for each course involved as indicated on the Add/Drop Form. The change must be reported to the Business Office and the Registrar's Office on an Add/Drop Form, which may be obtained from the Registrar's Office. For AIM courses, adding a course, dropping a course, or changing from one section of a course to another section of the same course requires the approval of the Director of the Evening Program. For courses taught at Community sites, adding a course, dropping a course, or changing from one section of a course to another section of the same course requires the approval of the Site Coordinator for the campus. Permission to add courses will not be given after the last date for late registration. Authorization for dropping a course will not be approved after more than 75% of the instructional days for a course are completed, as outlined below:

Course	Deadline	Submitted by the Student to
Columbia undergraduate and graduate full semester courses	Not later than 30 days before the end of the semester	Registrar
AIM courses	By the sixth week of class	Registrar
Courses at Community Campuses	By the third weekend of class	Site Coordinator or the Registrar

If changes are not properly approved and officially reported as stated above, students will receive a grade of F in the courses for which they are officially registered, and they will be charged for all such courses. Students will not receive credit for changed or added courses unless they officially register for those courses.