PHSC 1100: The Universe of Energy
Valdosta State University

Summer 2020
Dr. D. J. Drake

## **Course Syllabus**

Lecturer: Dr. D. J. Drake

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Suggested Texts: Conceptual Physical Science Explorations, 2nd ed, by Hewitt, Suchocki, and

Hewitt, Pearson Education, 2010. ISBN: 9780321807526

Corequisite/Prerequisite: MATH 1111

**Hours of Credit: 3** 

Course Schedule: MTWR 2:20-3:45 PM

Lectures will be devoted to discussing and clarifying material, to working illustrative problems, and to demonstrating physical principles and their applications. Your experience will be most rewarding if you read the sections to be covered before listening to lecture. You may not understand all the material, but a prior reading will help you focus your attention on the portion of the lecture that covers it.

**Course Description:** Basic concepts of the physical sciences behind energy, its uses and its effects on the environment which are related to everyday applications of science and technology.

**Core Curriculum Objectives**: Area D - Students will demonstrate understanding of the physical universe and the changing nature of science, and they will use scientific methods and/or mathematical reasoning and concepts to solve problems.

## **Departmental Curriculum Objectives:**

- 1. Students will analyze or predict the behavior of physical objects by applying the laws of motion, gravity, momentum, and/or energy.
- 2. Students will effectively use computer and information technology for calculations and word processing.

## How to get an 'A' in this course:

- 1. **ASK** questions if something is not clear.
- 2. **READ** the accompanying materials located on Blazeview.
- 3. WATCH and take notes all videos on Blazeview
- 4. Review notes **DAILY**. Do not wait until the day before the exam to study.
- 5. **PLAN** two hours a day to provide sufficient study time, 1 hour for reading and 1 hour for reviewing and/or homework.
- 6. Form a **STUDY GROUP**. Your study group can provide information that you might miss in class and provide a forum for questions and regular review of class material.

*Note:* Don't wait until you're drowning to seek help. The first-time water hits your face, make sure you can still survive.

**Final Course Grade:** A letter grade is determined only at the end of the term. Course grades will be based on test grades, final exam grade, assigned homework, and class participation

Test 1 200 points
Test 2 200 points
Test 3 200 points
Test 3 200 points

Homework 250 points (25 points each)

Final Exam 200 points

Final Letter Grade based on total number of points:

A 900 – 1050 points B 800 – 899 points C 700 – 799 points D 600 – 699 points F 0 – 599 points

**Final Exam:** The final exam for this class will be held on *Tuesday July 29, 2020 at 3:00 PM*. Although the final exam will be cumulative, a majority of the exam will be devoted to material covered after Test 3, see Course Outline on the last page of this syllabus. All tests must be turned in by the due date and time with no exceptions. Make-up tests can be granted only if the absence is considered an excused absence as listed in the attendance policy below and is at the discretion of the professor. This policy also applies to any bonus credit for the tests which may be given at any time over the summer.

**Tests:** During this semester you will have three tests on Thursday during week 2, 4, and 6 of the summer semester, see Couse Outline on the last page of this syllabus. Each test will be administered on Blazeview and will be consist entirely of multiple-choice questions. All tests must be turned in by the due date and time with no exceptions. Make-up tests can be granted only if the absence is considered an excused absence as listed in the attendance policy below and is at the discretion of the professor. This policy also applies to any bonus credit for the tests which may be given at any time over the summer.

Homework Assignments: Homework assignments based on the course material will be available on Blazeview under the "Assignments" tab. You may use your notes, a calculator, and the other resources available on Blazeview to complete the assignments. There are <u>no make-ups</u> for missed assignments. No grades are dropped for any in-class assignments. Your final grade is based upon an average of all In-class assignments and homework grades you earned throughout the semester.

**Attendance Policy**: The university attendance policy states, "The University expects that all students shall regularly attend all scheduled class meetings held for instruction or examination." An attendance sheet will be provided at all lectures. You are expected to sign the sheet for all scheduled sessions. In addition, "All students are held responsible for knowing the specific

attendance requirements as prescribed by their instructor.... When students are to be absent from class, they should immediately contact the instructor. A student who misses more than 20% of the scheduled classes of a course will be subject to receiving a failing grade in the course." Attendance for this summer class will be based on (1) Watching all assigned videos indicated in the homework assignments prior to the due date and time and (2) attending any group chat sessions scheduled by your instructor, see Course Outline. For this course there are 14 recitation sessions, which means if you miss 3, you will receive a failing grade in this course.

There are **six categories** of acceptable reasons under which a student may request a make-up test or exam. Make-up tests will be determined by the professor and at the sole discretion of the professor. These assignments may or may not exactly duplicate the original test or exam.

- <u>Death or serious illness in the immediate family</u>. The immediate family includes spouse, children, parent, siblings, grandparents and uncles/aunts. Verification may be required.
- <u>Serious illness or injury of the student</u>. A physician/health care professional must be consulted about the injury or illness, and home-rest or hospitalization that would prevent your attendance, must be prescribed. *Required Verification:* A letter from the student's physician is required, noting the duration of the time that the student was directed to rest at home.
- <u>Court ordered appearances or a call to jury duty</u>. *Required Verification:* A copy of the official notification.
- <u>Military duty and deployments</u>. *Required Verification:* A duty bill, note from the commanding officer or a copy of the deployment orders is required.
- Religious prohibitions. Verification may be required.
- Collegiate Athlete. Verification required

Student Opinion of Instruction (SOI): At the end of the term, all students will be expected to complete an online Student Opinion of Instruction survey (SOI) that will be available on BANNER. Students will receive an email notification through their VSU email address when the SOI is available (generally at least one week before the end of the term). SOI responses are anonymous to instructors/administrators. Instructors will be able to view only a summary of all responses three days after they have submitted final grades. While instructors will not be able to view individual responses or to access any of the data until after final grade submission, they will be able to see which students have or have not completed their SOIs, and student compliance may be considered in the determination of the final course grade. These compliance and non-compliance reports will not be available once instructors are able to access the results. Complete information about the SOIs, including how to access the survey and a timetable for this term is available at <a href="http://www.valdosta.edu/academics/academic-affairs/vp-office/directions-for-accessing-and-completing-sois.php">http://www.valdosta.edu/academics/academic-affairs/vp-office/directions-for-accessing-and-completing-sois.php</a>

**Disruptive Behavior Policy:** Disruptive students may be removed from the class. Disruptive behavior includes but is not limited to: offensive language and behavior, incessant talking, interrupting class with personal or non-academic concerns, distracting students from the task at hand, drawing on desk tops, taking frequent unscheduled breaks, annoying other students, tardiness, leaving early, using cell phones, or pagers in class, etc. All cell phones, pagers, and

beepers must be turned off or set on vibrate during class time. If you realize that you have an incoming call that you must attend to, leave the room quietly to do so. Do not attend to it in class. Students are responsible for being aware of the policies, procedures and student responsibilities contained within the current edition of the Valdosta State University Catalog and Student Handbook.

**Disability Services Policy:** Valdosta State University is an equal opportunity educational institution. As such, reasonable accommodations will be made for students with disabilities provided those students have registered with the Access Office for Students with Disabilities in Faber Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (VP), and 229-219-1348 (TTY). Present your instructor with the documentation. For more information, please visit http://www.valdosta.edu/student/disability/ or email: access@valdosta.edu.

**Title IX Statement:** Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: the Director of the Office of Social Equity, <a href="mailto:titleix@valdosta.edu">titleix@valdosta.edu</a>, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31698, 229-333-5463.

**Technology Assistance**: This course may require access to a computer. Students having technology problems may contact the Help Desk by phone at 229-245-4357 or e-mail a question at helpdesk@valdosta.edu. The Help Desk is located on the 2<sup>nd</sup> floor of the Odum Library.

Academic Misconduct and Dishonesty Policy: Students are expected to abide by the VSU Academic Integrity code. "Academic integrity is the responsibility of all VSU faculty and students. Faculty members should promote academic integrity by including clear instruction on the components of academic integrity and clearly defining the penalties for cheating and plagiarism in their course syllabi. Students are responsible for knowing and abiding by the Academic Integrity Policy as set forth in the Student Code of Conduct and the faculty members' syllabi. All students are expected to do their own work and to uphold a high standard of academic ethics." Violation of academic honesty includes, but is not limited to, the following actions:

- 1. Cheating on an examination either giving or receiving information.
- 2. Copying information from another person for graded assignments, including that information obtained from an Internet source.
- 3. Using unauthorized materials during tests.
- 4. Collaborating during examinations.
- 5. Buying, selling or stealing examinations.
- 6. Arranging a substitute for oneself during an examination.
- 7. Substituting for another person, or arranging such a substitution.

- 8. Plagiarism the intentional or accidental presentation of another's words or ideas as your own.
- 9. Submission of work other than your own for written assignments.
- 10. Incorporating the words or ideas of an author into one's paper without giving the author due credit.
- 11. Collaboration with another person or persons in submitting work for credit in class or lab, unless such collaboration is approved in advance by the instructor.

Any student found committing any of these violations will automatically receive a failing grade for the entire course. For more information visit <a href="http://www.valdosta.edu/academics/academic-affairs/vp-office/academic-honesty-policies-and-procedures.php">http://www.valdosta.edu/academics/academic-honesty-policies-and-procedures.php</a>

Course Compliance Statement: Enrollment in this class signifies that the student has agreed to abide by and adhere to the policies and regulations specified above. It is understood that the instructor may adapt or change this syllabus and the assignments contained within it according to circumstances that may arise during the course of the semester.

## **Course Outline for PHSC 1100**

(Tentative pacing schedule)

Week#	Topics	Assignments
1	Why do we move?	W: Chat Session in Collaborate F: Homework 1
2	What is energy?	T: Homework 2 <b>R: Test 1</b> (Weeks 1 & 2 material,  Online 2:00 – 4:00 PM)
3	Energy in Waves and Fluids Thermal Energy	T: Homework 3 W: Chat Session in Collaborate F: Homework 4
4	Energy and Electricity and Magnetism	T: Homework 5 <b>R: Test 2</b> (Weeks 3 & 4 material, Online 2:00 – 4:00 PM)
5	Atomic Energy Nuclear Energy	T: Homework 6 W: Chat Session in Collaborate F: Homework 7
6	Chemical Energy	T: Homework 8 <b>R: Test 3</b> (Week 5 & 6 material, Online 2:00 – 4:00 PM)
7	Space: the final frontier Energy in Our Lives	T: Homework 9 W: Chat Session in Collaborate F: Homework 10
8	Final Exam: All material from week 7	<b>T: Final Exam</b> (Online 3:00 – 5:00 PM)

Nomenclature: M – M onday; T – T uesday; W – W ednesday; R – T hursday; F - F riday