

Notice of Student and Instructor Accountability

Students and Instructors are accountable for all information on this syllabus, which is located in this course's Physics Moodle website

Course Information

Department of Physical Sciences
Survey of Physics ***Course and Lab***
PHYS 100/100L, all sections
Course Modality: F2F

Mr Bodell
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Course Description

PHYS 100 Survey of Physics

(3 Credits) This course provides an introduction to the concepts of physics and their application to the world around us and beyond. The course is intended for nonscience majors, very-limited math skills are necessary. Topics include the laws of motion, conservation of energy and momentum, properties of matter, heat, sound, electricity and magnetism, light, atomic and nuclear physics, and relativity. This course will satisfy a GEM Scientific Ways of Knowing requirement but will not serve as a prerequisite or substitute for any other physics course. COREQ: PHYS 100L (*This CWI course meets Idaho State Board GEM competency requirements in GEM 4 - Scientific Ways of Knowing.*).

PHYS 100L Survey of Physics Lab

(1 Credit) This required lab accompanies PHYS 100, which provides an introduction to the concepts of physics and their application to the world around us and beyond. The course is intended for non-science majors, very-limited math skills are necessary. Topics include the laws of motion, conservation of energy and momentum, properties of matter, heat, sound, electricity and magnetism, light, atomic and nuclear physics, and relativity. This course will satisfy a GEM Scientific Ways of Knowing requirement but will not serve as a prerequisite or substitute for any other physics course. COREQ: PHYS 100. (*This CWI course meets Idaho State Board GEM competency requirements in GEM 4 - Scientific Ways of Knowing.*).

To receive credit for this course, you must be officially registered for BOTH a lecture section and a lab section. If you have not attended both a lecture and a lab by the 2nd week of class, then your instructor is within his/her rights to perform an administrative drop. Please see the current academic calendar for the last date to drop with a 100% refund of tuition and fees.

Schedule

- Daily Room NO2 – Time TBA
- 2 Semesters-Fall-Spring

Instructor Availability

You may contact the instructor in a number of ways

- In-person office hours: Schedule will be posted and updated on Physics Moodle
Email: Jeff.bodell@mtchs.org

Course Learning Outcomes

The educational objectives of this course are to:

- A. Provide students with an introduction to the basic concepts of mechanics, the atomic nature of matter, and the behavior of its various phases.
- B. Provide students with a background regarding the fundamental laws governing heat, thermodynamics, wave motion, and the application of these laws to natural phenomena.
- C. Demonstrate the principles of electricity and magnetism, electromagnetic phenomena, and the wave nature of light.
- D. Help students acquire a fundamental knowledge of modern physics, both quantum and relativistic, through the discussion and use of the scientific method.

In this course, students will:

- A. Show understanding of the nature of the scientific method and how it is applied.
- B. Demonstrate understanding of the basic concepts of mechanics, the atomic nature of matter, and the behavior of its various phases.
- C. Use the basics of the fundamental laws governing heat, thermodynamics, wave motion, and the application of these laws to natural phenomena.
- D. Demonstrate the principles of electricity and magnetism, electromagnetic phenomena, and the wave nature of light.
- E. Demonstrate a fundamental knowledge of modern physics, both quantum and relativistic, through the discussion and use of the scientific method.
- F. Explore the tools used and the techniques of acquiring and interpreting data, writing assignments and laboratory work.

Outcomes Assessment

Student success in meeting the course objectives will be evaluated by homework assignments, tests, labs, a signature assignment, and the course final exam.

Grading Policy

Students must enroll in **both** a lecture course and a laboratory course. Enrollment in one course without concurrent enrollment in the other will not be allowed. This allows students to transfer classes to four-year institutions more easily.

The overall course grade will be based on the following:

Homework	15%
Tests (unit exams)	30%
Lab Activities	20%
Final Exam	20%
Signature Assignment	15% (Spring Semester)

Because the final grade is weighted, the final grade cannot be found by dividing your points earned by the total points. Check your PowerSchool grade often to see current grade.

Furthermore, students will not be able to show success in student learning outcomes without passing **both** courses. Therefore, receiving an F in PHYS 100 (which includes homework, tests, a final exam, and a signature assignment) will result in an F in both PHYS 100 and PHYS 100L. Likewise, receiving an F in PHYS 100L will result in an F in both courses; please note that missing 5 labs will automatically result in an F in PHYS 100L and consequently, an F in both courses.

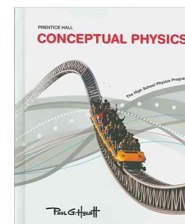
End-of-term grades will be assigned as follows:

- A = 90-100%
- B = 80-89%
- C = 70-79%
- D = 60-69%
- F = 0-59%

Your overall grade in the course will be posted in the Gradebook in CP Moodle. Please note that this grading scheme is subject to change based on the progression of the class. Changes will be announced in class and on CP Moodle.

Textbooks and Required Materials

- *Conceptual Physics*, Hewitt, 9thth Ed., Pearson - ETEXT Version in Physics Moodle
- A calculator
- A computer and reliable Internet connection to access online course materials



Instructional Conversation

Learning is an active exchange between faculty and student.

As a faculty, I will

- Instruct through- direct instruction and regularly scheduled office hours
- Assess through- graded coursework
- Inform through- lectures, feedback on graded coursework, and provide information and answer questions about course content
- Facilitate through- discussions with whole class and small groups

As a student, you will

- Attend- lectures, as well as office hours when necessary
- Submit- coursework (homework, labs, the signature assignment, tests and the final)
- Participate by- asking questions and commenting
- Interact by- with your group and instructor about all academic matters

Course Calendar

The schedule will be posted in Physics Moodle . Schedule is subject to change. Changes to this schedule will be posted on Physics Moodle.

Course Expectations

WEEKLY EXPECTATIONS: A student can expect to spend on average approximately 10 hours per week in total on this class (reading, homework, participating/attendance, etc.). Some students may need more time, and some may need less time each week. Please make sure that you are using the amount of time that is right for you to be successful in this class. Students are expected to submit the following:

- **HOMEWORK:** Homework is assigned each week through CP Moodle with clearly posted due dates. You may attempt the homework as many times as you'd like, but your score will be based on your most recent attempt.
- **TESTS & FINAL:** There will be Several Unit exams and a **comprehensive** final. These will be completed in class during our regular class period.
- **SIGNATURE ASSIGNMENT:** Each student will be required to complete a Signature Assignment. Details will be provided in class and in **CP Moodle during the Spring Semester**.
- **LABS:** Labs are due the day they are performed. There are no makeups for missed labs, but the lowest lab score will be dropped from the final grade.

ATTENDANCE:

- **LECTURE:** Attending lectures is vital to excelling in this course. Students will not be allowed to make up in-class assignments, activities, and quizzes that are missed.
- **LAB:** If you miss more than five labs you will not pass the lab and you need to pass the lab in order to pass the class. **In other words, if miss more than five lab Activities, you will fail the entire course.**

LATE WORK: Time management and adherence to due dates is expected and necessary to do well in this course. Students may receive **no more than 70% for any late assignment**. Any missing or late assignment **may be submitted up to two (2) school business days after the assignment due date** in PowerSchool If life circumstances interfere with your ability to complete assignments and tests on time, please communicate with your instructor immediately.

- **TESTS:** If you miss a test without prior arrangements, you must contact the instructor within 24 hours to arrange for a make-up test. If you do not, you will receive a score of zero for the test. There will be a 10% deduction on any late test. In other words, the highest score you can get on a late test is a B.
- **HOMEWORK:** Homework is assigned each week through CP Moodle with clearly posted due dates. Late homework will be accepted for 70%, but only if you turn it in within 2 business days of its due date.
- **LABS:** Labs are due within 2-3 days from when they are performed. See Powerschools Gradebook
- Exceptions for military personnel will be made in accordance with College policies; no other exceptions will apply.

SAFETY CODES/EQUIPMENT USE GUIDELINES: Please refer to the Laboratory Safety section below.

SMOKING, FOOD & DRINK: Smoking is not allowed. **Food and drink are strictly forbidden** in the laboratory classroom. Please do not remove such items from your bags, nor discard of food and drink related garbage in the laboratory garbage cans.

CELLPHONE USE: Please be respectful in your usage of cellphones during class. Have your phone muted and do not allow your phone to distract you or your fellow classmates. Use of phones is strictly forbidden during tests.

END OF COURSE ELECTRONIC EVALUATIONS: To help instructors continually improve courses, students will complete anonymous online evaluations for each course. Students will be able to access evaluations at the end of the semester by clicking the "Course Evaluation" button in CP Moodle.

Personal Technical Skills

This course will not provide information on how to use a computer, use Physics Moodle, navigate the web or manage electronic files. Students who are having difficulty should contact their instructor, [IT Help Desk](#) or [Tutoring Services](#). Please use the resources listed above or speak with the instructor before dropping a course.

Students must be able to do the following with or without accommodation:

- Use an internet browser to navigate the internet and CP Moodle.
- Download, upload, create, save, edit and open documents using Microsoft Office applications, such Word, Excel and PowerPoint.
- Download and upload audio and video files.

Civility and Behavioral Expectations

The College of Western Idaho is committed to educational excellence and recognizes that to achieve that excellence, students, faculty, and staff have a right to be in a safe environment, free of disturbance and civil in all aspects of human relations. Membership in the CWI learning community places a special obligation on all members to preserve the safe learning environment, regardless of the medium of the environment. It is the responsibility of instructors to determine, maintain, and enforce the standards of behavior required to preserve that safe environment.

Behavior that has a negative impact on the learning environment is prohibited. Such behavior may include, but is not limited to, rude, sarcastic, obscene, or disrespectful and/or disruptive behavior. Instructors will determine the appropriate response to problematic behavior in line with the procedures stated in the CWI Student Handbook. Problematic behavior may result in a student being removed from the class session and/or referred to the CWI Academic Conduct Process. For information on how problematic behavior will be managed, see the [CWI Student Handbook](#). It is the student's responsibility to check their email to receive notification of any scheduled appointments or other urgent communications.

Any student or other member of the learning community may report a violation of the Student Code of Conduct [here](#).

Academic Integrity

One of the College's Core Themes is [Instructional Excellence](#), and in order to achieve instructional Excellence, academic integrity must be upheld. Academic Integrity is the "commitment to five fundamental values: honesty, trust, fairness, respect, and responsibility. ... these five values, plus the courage to act on them even in the face of adversity, are truly foundational to the academy" ([The Fundamental Values of Academic Integrity](#), 2013). These values are especially important in how students represent their own learning, ideas, and work. Practicing academic integrity includes, but is not limited to, non-participation in the following behaviors: cheating, plagiarism, falsifying information, unauthorized collaboration, facilitating academic dishonesty, and violating program policies and procedures.

Aligned with my commitment to academic integrity and the ethical use of technology, this course allows AI tools like ChatGPT, DALL-E, and similar platforms for specific tasks such as brainstorming, idea refinement, and grammar checks. Using AI to write drafts or complete assignments is not permitted, and any use of AI must be cited, including the tool used, access date, and query. It is the expectation that in all uses of AI, students critically evaluate the information for accuracy and bias while respecting privacy and copyright laws.

The use of AI outside the allowed criteria constitutes academic dishonesty, is equitable to cheating and plagiarism, and will be met with sanctions consistent with any other academic integrity violation.

For additional information on academic integrity expectations, see the [Student Code of Conduct](#). Violations may result in disciplinary action ranging from failure of the assignment to failure of the entire course. Acts of academic dishonesty, especially when sanctions are given, are reported and run through the Academic Conduct Process. Repeated acts of academic dishonesty have more severe institutional consequences.

Title IX & A Respectful Community

Title IX guarantees all students the right to an education free from discrimination on the basis of sex. This includes the right to an education free from sexual harassment, including sexual assault. This may include unwelcome conduct of a sexual nature in class, or in online discussion boards or through chat or video conferences. This law also protects students from discrimination based on pregnancy or being a parent and provides support options as well. If you, or someone you know, may have been experienced sexual harassment or discrimination of any kind, you are encouraged to report it to the College Title IX Coordinator by completing a [report here](#), or by e-mailing respectfulcommunity@cw.edu. Filing a report allows the College to provide supportive measures to those involved. It does not obligate a student to go forward with an investigation, and all information reported is protected under federal law. For more information, [click here](#).

Student Services

CWI provides a number of offices and services to assist students on their academic journey. Below is a list of the services most commonly accessed by students:

- [One Stop Service Centers](#) – Provides assistance with admissions, advising, registration, financial aid, and most other common needs you may have. They are a good first stop for any questions.
- [Student Disability Services](#) – Provides accommodations and support for students with a range of disabilities.

- [Counseling Services](#) – Short-term counseling for students provided free of charge.
- [Library & Research Support](#) – Assists students with research, study skills, textbook reserves and other services key to academic success.
- [Tutoring Center](#) – Free tutoring services on a range of academic subjects, available to all enrolled students.
- [Writing Center](#) – Provides strategies to help students identify opportunities to improve the quality of their writing, free of charge.
- [Assessment & Testing](#) – Proctoring services for a range of course exams, accommodated testing, and outside certification tests.
- [Student Affairs](#) – Provides a range of engagement opportunities, including professional and interest organizations, student government, support for veteran students & families, and CARE Services to support students through unexpected life events.

CWI COVID-19 Response

CWI is committed to providing a safe learning environment for all of our students. We will be monitoring the class environment and delivery to ensure continued compliance with CDC and State of Idaho guidelines. Any change to course delivery will be communicated directly to students.

Laboratory Safety

Students will be expected to read and abide by the lab safety guidelines demonstrated and reviewed in class before lab activities.

Emergency Procedures – On Campus Only

CWI posts instructions for evacuation in all rooms and encourages everyone on campus to review the [CWI Emergency Handbook](#).

Idaho General Education Matriculation (GEM) Competency

This course meets the Idaho State Board Gen Ed Matriculation (GEM) course competencies for Written Communication, Oral Communication, Mathematical Ways of Knowing, Scientific Ways of Knowing, Humanistic and Artistic ways of Knowing or Social and Behavioral Ways of Knowing Ways of Knowing courses. For more information see the [State Board competencies](#).

Signature Assignments

This course meets the Gen Ed Program Outcome of Reason Ethically, Consider Global Perspectives, Practice Inquiry and Analysis, Utilize Information Literacy Skills, Solve Problems, and/or Demonstrate Integrative Learning through its Signature assignment. For more information see the [CWI Gen Ed Program Outcomes](#).

Affidavit of Syllabus as Contract

Enrollment in this course implies that you have read, understood, and agree to abide by the content in this syllabus.