

## RIVERSIDE RESPECTS:

Be Responsible  
Be RespectfU  
Honor Academics  
Be Safe

### Course Syllabus: Physics, Semester I

Instructors:

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## HONOR ACADEMICS

### COURSE DESCRIPTION

This course provides a practical application of the scientific method with a strong emphasis on developing lab reports and techniques. Students will construct lab experiments in small and large groups by applying a predetermined algebraic formula to an historical or current problem analysis. Students will use scientific units of measurement in all lab experiments. This course also provides an overview of the most practical concepts from physics that surround most modern human activities.

### GOALS/

**OBJECTIVES:** Our Physics course is specifically designed to make you use the skills learned from previous science courses while attending Riverside High School. All instructional learning intentions and student success criteria will be based on the Next Generation Science Standards for Physical Science. We have attached a copy of those standards and they are found at:

[http://www.nextgenscience.org/search-standards-dci?tid\\_1%5B%5D=15&=Search](http://www.nextgenscience.org/search-standards-dci?tid_1%5B%5D=15&=Search)

The disciplinary core ideas we will be covering are coded HS-PS1 through HS-PS4, HS-LS2, HS-ESS1 and HS-ESS2.

### REQUIRED SUPPLIES:

3-ring binder (Separated into 4 DIVIDED sections:  
**NOTES, PREPERATION, LABS, &  
PERFORMANCE**)  
Scientific Calculator  
Portable Flash Drive (1GB)  
Writing utensils (bring extra)  
Loose leaf paper

### STANDARDS BASED GRADING

Assignment	Example	Weight
Preparation	New skills learned in class, new topics to be discussed, some book work, journaling	.25*
Performance**	Final lab write-ups Tests & quizzes Some writing assignments and Some book work (especially review)	3 x 2 x 1 x

### \*\*Retake policy:

1. You must score a grade of 60% (a BA) or below.
2. You must hand in corrections on your original work.

### Achieve 3000

In this course Achieve 3000 articles will be assigned every other week. Students should read the article and complete the reading comprehension activities for class credit. These scores will be recorded in IC as a performance grade, which will impact a student's overall grade in the course.

**STANDARDS BASED GRADING & INFINITE CAMPUS (continued):**

- Please read the attached Riverside University High School's Standards Based grading policy & grading scale.
- Preparation is NOT weighted, BUT it is the only thing that will help you understand the material.
- REQUIRED: 3 pieces of performance with an average score of >60%
- Performance is weighted.
- Retakes are acceptable, but restricted.
- If you want to pass, you are expected to study regularly. We and this room are available to you.
- Above all, YOU are responsible for YOUR learning and YOUR grade. Communication is key!

**Riverside University High School: Standards-Based Grading Policy**

Continuing into the 2016-17 school year, all teachers will use Standards-Based Grading to calculate student grades. All report card grades will be based on students' mastery of the academic standards identified for each course. Content standards will be outlined in each teacher's parent letter at the beginning of the semester based on the Common Core State Standards, the Wisconsin Model Academic Standards and/or the Next Generation Science Standards.

Teachers will collect 3 pieces of evidence for each standard to determine what students know and can do using a proficiency based scoring system. Teachers will offer 3 ways for students to demonstrate mastery and will focus on progress over time by replacing old evidence with newer evidence. Practice activities will be provided and students will be encouraged to use practice as a way to strengthen their skills.

Effort and behavior will not be calculated in the students' grades but will be communicated to parents through comments in the Parent Assistant. No credit will be given for non-academic activities or behaviors. Students must show responsibility for their own learning by completing the "Practice" activities (*i.e. what used to be called "Homework"*), acting on teacher feedback on their practice assessment, and taking necessary steps to re-take assessments when needed to master the concepts/skills being measured. **The responsibility is on the students' shoulders to demonstrate their mastery of concepts/skills in each class.** Each of the Practice activities are "tallied" (marked off) in the grade book once each student completes it satisfactorily, but these tallies do NOT have a value in the students' grades. **Some students will complete practice activities quickly; some may have to redo them several times.**

Students' grades will only reflect the "Evidence" of the **State/National Standards being assessed.** There will usually be three Evidence "snapshots" of student work per semester per Standard, and these snapshots of all the Standards will be taken together to determine the learning success of each student for that class at the end of the semester.

**Students will be provided with:**

- Clear expectations
- A rubric addressing the evaluation of the task and assessing mastery of the objective (standard)
- The opportunity to practice with no penalties attached to the practice
- Descriptive feedback that will address the point at which the student started and their progress toward meeting the objectives.

**Students will receive one of the following grades for their evidence** (quizzes, tests, projects, papers, labs, presentations, oral commentaries, anecdotal observations and more):

**Advanced:** The student demonstrates a comprehensive and in-depth understanding of rigorous subject matter and provides sophisticated solutions to complex problems.

**Proficient:** The student demonstrates a solid understanding of challenging subject matter and solves a wide variety of problems.

**Basic:** The student demonstrates partial mastery of prerequisite knowledge and skills that are fundamental for proficient work.

**Minimal:** The student demonstrates limited knowledge and skills in the subject matter and a limited ability to apply knowledge and skills effectively.

Proficiency Scale	Meaning	Numeric Conversion (done by ESIS)	Report Card Grade Conversion (done by ESIS) by averaging the value of the proficiency scores shown in column 3.
<b>AD</b>	Advanced or 4 on a 4 point rubric	100	90-100=A
<b>PR</b>	Proficient or 3 on a 4 point rubric	85	80-89= B      70-79= C
<b>BA</b>	Basic or 2 on a 4 point rubric	65	60-69=D
<b>MI</b>	Minimal or 1 on a 4 point rubric	50	59 and Below=U
<b>O</b>	No evidence ( <i>the LETTER "O", not a zero</i> )	0	U

## Citizenship Grade:

Student will also be given a civics grade each report card in conjunction with their academic grade. Unlike the academic grade which will focus solely on academics, the civics grade will be derived from the outcomes of the expectations listed below:

### BE RESPECTFUL: *We expect you to...*

- ☞ Respect the rights of everyone in this room. Rights, meaning, the right to an equal, peaceable and safe educational experience. **NO BULLYING, AT ALL.**
- ☞ Use appropriate language.
- ☞ Fill out the hall pass, BEFORE bringing it up. NO PASSES DURING any lunches, any labs and last hour. In addition, we reserve the right to cut off your passes at any time, for ANY length of time.
- ☞ Follow the rules of the school as outlined in your student handbook. If you are tardy, report to the tardy room.
- ☞ **NO ELECTRONICS!**
- ☞ Use all equipment in this room APPROPRIATELY!!!

### BE RESPONSIBLE: *We expect you to...*

- ☞ **BE SEATED BEFORE THE BELL & LEAVE AFTER THE BELL.**
- ☞ Be responsible for YOURSELF and NO ONE ELSE! (Unless there is an emergency.)
- ☞ Communicate responsibly, with words, NOT physically.
- ☞ No eating or drinking in class!
- ☞ Be mindful of all room resources available to you & that they are shared!
- ☞ Pick up all hand-outs upon entering class. Keep & maintain all hand-outs in your binders. We have **one copy** for all students. Any additional copies are at YOUR EXPENSE!

### HONOR ACADEMICS: *We expect you to...*

- ☞ **Bring all materials needed.** Write your assignments down (in your agenda).
- ☞ Stay on topic! Extracurricular conversations distract you from your learning.
- ☞ Turn in your work, on time. Late points will be subtracted as we see fit. Make-up work is to be done outside of class time and completed in 2 days after your absence. Please, note the calendar.
- ☞ STUDY! STUDY! School's our buddy! I expect you to study or read content for 15-20 min EVERY DAY!
- ☞ Keep all graded work. If you don't keep your work, you have no way to keep track of your evidence. All unclaimed work will be recycled in a timely manner.
- ☞ Listen to others, respectfully and constructively. If someone else is talking you are quiet & listening Participate in small and large group discussion, and answer questions, in public.

### BE SAFE: *We expect you to...*

- ☞ Keep this room clean. You will not be dismissed from class until labs are cleaned to our satisfaction and passes will not be given for tardiness. (If you're used to your mother picking up after you, bring her with you.)
- ☞ Be resourceful! **READ YOUR LAB PROCEDURE!!!** If we feel that you are not prepared for lab, then you will not be doing the lab during class.
- ☞ **Notify me immediately of any injury or fire--immediately!** Personal safety takes precedent over anything else! You also need to notify me of spills and breakages.
- ☞ Communicate (in private) any special needs you may have! IT IS YOUR RIGHT!
- ☞ Strictly follow the safety guidelines outlined for you on your **SAFETY CONTRACT**. If you do not return the signed safety contract, show evidence of proficiency with safety guidelines or continue to violate safety rules, you will be dismissed from any or all labs during class time.

### PROGRESSIVE DISCIPLINE:

Severity of Offense	Discipline
Mild	One-on-one discussion of expectations; loss of phone for 1 class period.
Medium	Temporary removal from class & discussion; loss of phone for 1 day.
Medium Severe or Repeated	Phone call home; phone goes to office
Severe	Referral, loss of privilege; phone goes to the office
Extreme	Referral & group conference & loss of privilege; phone goes to the office

## Course Outline

Week*	Discipline within Science	Topic
1	General	Intro. & Safety
2	Basic Physics Mathematics	Algebra Review, S.I., Conversions, Graphing
3	Vectors & Constant Motion	Scalar vs. Vector
5-6		Speed/Velocity
7		Motion Graphs
8		Acceleration
9-10	Acceleration	Uniform Accelerated Motion
11-12		Accelerated Motion Graphs
13-14		Freefall
15	Projectile Motion	2-D Kinematics
16	Newton's Laws	Free-Body Diagrams
17		Friction
18		1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> Law
18	Performance Assessment	Everything!

**Again, you are responsible for all material presented in this class.**

