# RIPON HIGH SCHOOL

**Physics** Room 1104

Syllabus, 2025/26

Mr. Nick Goeldi

920-748-4616

goeldin@ripon.k12.wi.us

Below is a link to my school website

https://sites.google.com/a/ripon.k12.wi.us/mr-g-s-website/home/general-physics

Contact Times: Before, at lunch, and After School

While you study physics, you are the latest in generations of thinking men and women who have tried to understand the physical world around them. Learning physics requires powers of observation, critical thinking abilities, and a firm commitment to evidence and truth. In this course you will be analyzing lab data, using mathematics to explain scientific phenomena, and be involved in a lot of group-based learning opportunities.

# BASIC SUPPLIES- required, please get them as soon as possible - BY TUESDAY Sept 8th

- 1. A 3- ring binder ( at least one inch wide) plus lined paper for your binder.
- 2. Pencils, pens, and at least two dry-erase markers of different colors for white boards.
- 3. A calculator that has square root and sine/cosine functions (\$20 calculators should be fine but Ti83/84 will work as well)

# Important life skills you will develop

- 1. **Deadlines** Expect daily homework assignments to help you develop a stronger conceptual understanding of Physics. If you don't do your homework you will not be ready to join the discussion and students who don't do their homework have 10% lower test scores.
- 2. Accountability- You will be working with your peers every single day. Whether you are presenting, experimenting, designing, or analyzing you will be expected to work with you group by contributing ideas, having a positive attitude, and coming prepared to do your part.
- 3. Public Speaking- We all hate it, I get that. Public speaking is a valuable life skill that helps with
  - **a.** Overcoming a fear Just like other skills you need practice, don't worry you're not alone
  - **b.** Self Confidence boost- You will be creating your own equations and applying them
  - **c.** Attract Opportunities- Employers love someone who can articulate and communicate
  - **d.** *Influence others- All great ideas start somewhere*
  - **e.** *Increase empathy- Learn to help others learn*
  - **f.** Allows you to master a subject- You don't know it unless you can explain it

### **YOUR GRADE IN PHYSICS** will be based off of labs, quizzes, and exams

**Homework** is an essential learning tool in this class that will help you develop a deeper understanding of the main concepts. It is not just busy work!!! You must have each problem started at the very least and include what is confusing you about the problem so that you will know what kind of questions to ask in class. **I don't know if this is not an acceptable answer.** . (Keep them in your binders)

**Your 3-ring binder** should contain your homework, lab reports, notes, and quizzes. On the day of a unit test I may ask to see your binders to check that you have been taking good notes and keeping organized as part of your homework grade. Your binder will be an excellent resource, and should be kept well organized.

# **Responsibilities and Expectations:**

#### Your Responsibilities:

As a student, you have several responsibilities to take on. Assuming these responsibilities will make learning science easier and more enjoyable. Furthermore, they will help you develop your study skills in general, helping you how to learn.

- Homework will give you stamps, it will affect your grade: This means coming to class with your homework complete.. At the start of every class that involves a white-board session I will do a homework check and place a stamp on your worksheet if you have all of your homework complete. In order to receive a full stamp your homework must have your name on the top of the paper and have every problem attempted. Writing I don't know, leaving it blank, or writing something none related just to fill the space will result in either a half stamp or no stamp. A full stamp is worth two points, half stamp is 1 point. Stamps will be collected around the time of each unit tests, if you lose your sheets you lose your stamp points so keep them in your binders to stay organized.
- Participate in Class: This applies to every part of the class: experiments, whiteboarding sessions, and class discussions. Good participation in class discussions I may bump your grade up if you are close, if I see virtually no participation in discussions and very little homework being done I may bump your grade down.
- Ask for Help if you need it: Physics can be a challenging subject. It is of dire importance that you ask questions when struggling with something. The best time to come in for help is either before or after school. Oftentimes, a quick explanation is enough to take away the confusion and frustration. Feel free to contact me in these ways:
  - o Before or after school or class
- If you are sick or miss class for whatever reason, email me what the homework was and I will email it to you.

*My Responsibilities:* 

In addition to the responsibilities listed above for you, I believe I also have some responsibilities to you:

- **Be Prepared for Class:** Contrary to popular belief, I have homework too. This isn't only lesson preparation, but also taking care of grading and other feedback in a timely manner.
- Keep your cell phone put away unless needed for labs.... Those tweets can wait!

## Skills-Based Grading:

Modeling (55%) This will be coming from assessing mathematical, graphical, computational, and physical models to describe the physics.

Communication (10%) This will be coming from participation in white board discussion and informal assessments on your ability to convey the main ideas.

Lab (35%)- This will be coming from analyzing a lab experiment, discussing variables, and collecting data.

Letter Grade	GPA Value	Grading Scale (% - rounding to the nearest Tenth)
A	4.00	92.5 – 100
A-	3.67	89.5 – 92.4
B+	3.33	86.5 – 89.4
В	3.00	82.5 – 86.4
B-	2.67	79.5 – 82. 4
C+	2.33	76.5 – 79.4
C	2.00	72.5 – 76.4
C-	1.67	69.5 – 72.4
D+	1.33	66.5 – 69.4
D	1.00	62.5 - 66.4
D-	0.67	59.5 – 62.4
F	0	0 – 59.4

• **Provide Help:** As mentioned above, Physics can be a challenging subject. Nothing is more frustrating than working on (and possibly worrying about) something that just is not coming to you. Don't get yourself more frustrated, but simply put the physics aside and promise yourself to come in after school or before class for some assistance. However, this does not excuse you from making an effort with the material before seeking help. I will ask to see what you've accomplished so far.

Quizzes may be announced or unannounced. I give around 3 quizzes per unit, a majority of the quizzes are unannounced pop quizzes to make sure that you are keeping up with your studies and asking questions during the whiteboard sessions.

<u>Homework/Methodology</u> A sample of what we will be doing includes written work, quizzes, exams, and discussion where I am looking for an understanding of content (not memorizing notes/examples). You will also be graded upon teamwork and individual work on projects. Most

of the materials will be found on the links from my website and google classroom/canvas. Staying on top of notes/lab/review will be very important. There will be a summative test at the end of the semester. Dishonesty/Plagiarism/Cheating is not tolerated. See <u>dishonesty policy in handbook</u>.

**Lab Practical** is your chance to test what you've learned in a real life scenario. Often these will come near the end of most, but not necessarily all units. Often you will need to be able to work in a group with the physical concepts and mathematical models that we will be developing in the unit. Your grade will consist of your calculations, and how accurate you were to hitting a target.

**Tests** are given at the end of major units. If you miss a test due to an excused absence, be ready to make it up the day you return (you will have as many days as you were gone to make it up.) You will not have class time to make up tests, so you will need to plan your time accordingly. Each test is worth a different amount of points, longer units will have larger tests.

Quizzes, Unit Exams, Lab Practicals, and Lab reports will make up the bulk of your grade. Five exams will make up the majority of the semester grade.

**Attendance** is not part of your grade directly, but it is critical to success in this class because if you miss a lab you will need to make it up on your own time. Also you may miss some good discussions about a particularly troubling problem. If you must miss a class, responsibility for make-up work lies with you; make sure you check with Mr. Goeldi's website for what you missed. Usually, you will need to make arrangements to do some work outside of regular class hours.

Late work will be accepted but will be penalized. If you did not complete an assignment make sure to pay attention during whiteboards and get extra help to get caught up. If you miss a test or lab you must come in on your own time to make up the work if you have a legitimate excuse. (Things like "I didn't hear my alarm" and "I forgot we had a test" are not acceptable) However, I understand that you do have lives outside of class and that. If you were not able to complete an assignment due to illness, family problems, or other things of a serious nature additional time to complete a test, lab, or assignment may be given. Emailing me at night so that I know in advance is encouraged.

**Expectations-** Participation is extremely important to this class. It is expected that you will make constructive comments during class discussions, show respect for classmates, and get help when you need it (don't fall behind because everything in physics builds upon each other.)

**Reassessment Policy**- If you're not happy with a grade you can make an appointment to redo part of the assessment, take an alternative assessment, or do a verbal discussion justifying an answer to receive some credit back for up to 50% of what was taken off.

## **District and Classroom policies:**

• Hat/Hoods: No student shall be permitted to wear hats or have hoods up in classrooms.

- Cell phones: No student shall have cell phones out during class time. I do not want to see or hear them!!! If a phone is out, it will be taken and brought to the office. Please adhere to this, we have such limited time together, let's make it count.
- No backpacks or large bags in class please because they can cause tripping hazards or risk getting damaged.
- Be in your seat ready to work when the bell rings. We MUST be consistent with the seating chart to limit your contact with other students and so I can report who you had contact with incase of a + COVID19 result.
- Respect all people and property in the room.

This rule means I expect positive attitudes, using the ENTIRE class time for class content, and no destruction of any materials unless specifically told to do so.

- Do not TOUCH anything in the room unless it belongs to you or you are instructed to do so. Again, very important this year as everything touch needs to be sanitized between classes.
- Come ready for the day (assignments/device/pen or pencil/etc) and be ready and in your assigned seat when the bell rings or before and stay in your assigned seat throughout class time unless instructed to do so.
- Follow proper lab safety and lab directions including
  - NO FOOD IN THE ROOM, and no beverages other than pure water in a closable bottle.
- No bullying/harassment/racism/intolerance/name calling/or horseplay in and around the classroom.
- Class time is for class content.
- Complete your own work.
- If asked to do something, do so right away.

A warning <u>may</u> be given on a first offense, after that there will be consequences including but not limited to confiscation, being held after class, referrals, detention.

## Link to standards

#### Outline of Units

- 1. Scientific Thinking and Methods
- 2. Constant Velocity, Displacement, and General Motion
- 3. Uniform Acceleration
- 4. Projectile Motion
- 5. Static Forces, Newton's First Law of Inertia, Newton's Third Law of Reactive Forces
- 6. Unbalanced Forces and Newton's Second Law
- 7. Conservation of Energy
- 8. Centripetal Force (Center Seeking Forces)
- 9. Conservation of Momentum

# Masks are a requirement in class at all times Gloves will be required on lab days A minimum distance of 6 ft should be used at all times. Physics Contract: Please read the physics syllabus with your parent/guardian then sign and return this form to Mr. Goeldi by Friday, September 6, 2019. Student Name Student Signature \_\_\_\_\_ Date\_\_\_\_ Parent Signature \_\_\_\_\_ Date\_\_\_\_ Physics Contract: Please read the physics syllabus with your parent/guardian and return to Mr. Goeldi by Friday, September 6, 2024. Student Name Student Signature \_\_\_\_\_ Date\_\_\_\_

Parent Signature \_\_\_\_\_ Date\_\_\_\_

**COVID SAFETY**