**Burgin Independent High School**

**Mathematics: Physics Course Syllabus**

**Coach Terrell**

**2014-2015**

***The mission of Burgin Independent School is to involve the community, parents and staff in motivating and educating all students to become lifelong learners, effective communicators, independent thinkers and productive citizens.***

**CONTACT INFORMATION:** Room 122

Office Hours: Learning Lab/5th period OR

Schedule a time with me from 3:15 – 4:00 pm

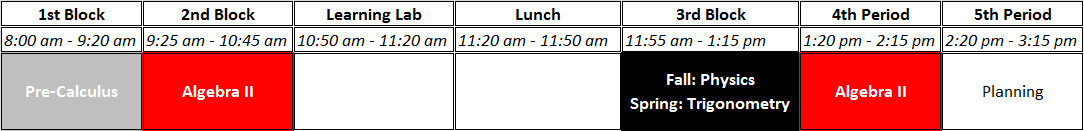
Phone: (859) 748-5282 ext. 122

Email: [chad.terrell@burgin.kyschools.us](mailto:chad.terrell@burgin.kyschools.us)

Classroom Website: [www.burginterrell.weebly.com](http://www.burginterrell.weebly.com)

Twitter: <https://twitter.com/burginterrell>

**SCHEDULE:**



**COURSE MATERIALS**

The following is what I expect you to bring to class with you every day to ensure your success:

* Textbook: *Pre-Calculus: Enhanced with Graphing Utilities,* 3rd Edition, Sullivan & Sullivan
* 3 Ring-Binder
* Loose-Leaf Paper
* Graph Paper
* Dividers (Notes, Homework, Quizzes, Tests, Labs)
* Pencils and/or Pens
* **TI-83 Plus** and/or **TI-84 Plus** Graphing Calculator (Class set of TI-84 calculators will be provided in class for you to borrow during school but you will need one for other high school/college classes in the future and for homework. My calculators STAY in my room. I prefer TI-84 plus since that is what we will be using in class)

**COURSE DESCRIPTION:**

Physics is both a qualitative and a quantitative study of the central concepts of physics with emphasis on phenomena that students have observed in the everyday world. As a qualitative course, our emphasis will be on comprehension of basic concepts. As a quantitative course, our emphasis will be on the use of mathematics to understand and explain various natural phenomena. Physics is beneficial to all students - regardless of their post-high school plans. For students who plan to study one of the sciences in college, Physics is an excellent introduction to material that will be covered in a college course. For students who do not plan to study one of the sciences in college, Physics provides a base from which to view natural phenomena more perceptively. Topics covered this semester will be: mechanics (kinematics, Newton’s Laws of Motion, work, power, and energy), momentum and impulse, torque and rotational motion, waves and sound, and basic circuits.

***1st Nine Weeks***

1. Introduction to Physics
2. Kinematics and Motion
3. Newton’s Laws
4. Work/Power/Energy

***2nd Nine Weeks***

1. Waves/Sound
2. Optics
3. Electrostatics/Electricity
4. Nuclear Physics

**Mr. Terrell’s Classroom Procedures**

Procedures are important to society so that people can function in an acceptable and organized manner. For instance, when coming to a traffic light, playing sports, ordering at a fast-food restaurant, tying your shoe, or at a wedding ceremony everyone is expected to follow procedures. I worked as a quality control engineer at a paint and an automotive factory. I had to follow a set of procedures to ensure that the paint and auto parts were to a specific standard before they were shipped out and all team members were safe.

1. ENTERING THE CLASSROOM
   1. Quietly enter the room and get out all materials needed for the day (textbook, paper, pencil, notebook, calculator, assignments, erasers, etc.).
   2. Immediately and quietly get to work on your daily GOT Math question(s) for the day. I expect you to write question, show your work, and box your answer!
   3. Place your GOT Math Weekly sheet and homework in your binder. Clear your desk when asked by the teacher.
   4. When you are finished with the daily GOT Math question(s), study you’re homework and prepare for daily homework quiz.
2. WHAT TO BRING TO CLASS (BE PREPARED)
   1. Pencil /Pen
   2. Paper
   3. Calculator
   4. Binder
   5. Assignment
   6. Textbook

\*\* If you forget, I have a limited supply of paper and pencils on my cart. If you borrow a pencil, please return it. I will also have a set of TI-84 Plus calculators you can use, but they will not be permitted outside of the classroom.

3) ABSENCES/TARDIES

* 1. WHEN YOU ARE TARDY- When are you tardy? If you are not in you are not in the room and in your seat when the tardy bell rings (per Student Handbook). Running in last second doesn’t count!
     1. Excused – I will need a note from another teacher, administrator or adult to excuse a tardy. Immediately begin join in with the class activity.
     2. Unexcused – Sign Tardy Notebook (See Tardy Policy in Student Handbook pg. 57)
        1. 2 Unexcused = Written & Verbal Warning
        2. 3 Unexcused = Conference with Principal & Afternoon Detention
        3. 4+ Unexcused = Conference with Principal & Friday Night School
  2. WHEN YOU ARE ABSENT
     1. Excused – in addition to a note to the office, you will need to hand me a note from a doctor, parent/guardian, or an adult with an explanation of the absence.
        1. Get Missed Homework/Assignments & Notes
           1. Go to Homework/Assignment Folder. In the folder students will find the: date, objective for the day, and assignment. If the assignment is a worksheet, I will place an extra copy of the worksheet in Homework/Assignment Crate.

\*\* You can also go to classroom website [www.burginterrell.weebly.com](http://www.burginterrell.weebly.com) (click your class’ tab at the top). It will have the same information in a calendar on the webpage.

* + - * 1. Get notes from classmates for dates you missed school.
      1. We will have daily homework quizzes that cover topics from assigned homework. You can make any of these quizzes up before the end of a unit. After the unit, you will not be allowed to complete the quiz.
    1. Unexcused
       1. Follow same procedure as above for getting your assignment.
       2. You will receive a 0 for participation and group activities for the days missed.
    2. IT IS YOUR RESPONSIBILITY TO GET YOUR WORK THAT YOU MISS (INCLUDING ASSIGNMENT, HOMEWORK, NOTES, AND QUIZZES)

4.) INTERRUPTIONS (INTERCOM, SOMEONE KNOCKS ON THE DOOR, PHONE RINGS, ETC.)

1. Anytime there is an outside interruption within the class, you are to:
   * 1. Stop activity (put down all materials) and listen quietly.
     2. Once interruption is over, resume activity as you were before (use common sense).

5.) LEAVING THE CLASSROOM (nurse, bathroom, water fountain, office, etc.)

1. You are not allowed to leave your seat during lecture time.
2. Signal to me (silent raised hand) that you need to leave the classroom and I will let you know if it is ok or not.
3. Sign Hall Pass Notebook and take hall pass with you (one person at a time).
4. No Leaving 1st or Last 10 minutes of class.

\*\* If you know you are leaving early, let me know before class begins.

6.) CLASSROOM ENVIRONMENT (CHAMPS)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **PRESENTATION (Lecture, Demonstrations, Discussions, etc.)** | | **INDIVIDUAL**  **(Seat/ Book work, worksheet, finish early)** | | **GROUP**  **(Whiteboard, Activities, Labs, etc.)** | **TEST/QUIZ** | | **TRANSITIONS**  **(Individual to Group, Group back to seats, etc.)** | |
| **C**  **O**  **N**  **V**  **E**  **R**  **S**  **I**  **N**  **G** | Voice level: 0 | | Voice level: 1  Students can ask questions about the assignment with a student next to them. | | Voice level: 2  Students can talk only with their group members about the assignment given to the group. | Voice level: 0 | | Voice level: 0 | |
| **H**  **E**  **L**  **P** | IN-CLASS:   * Raise your hand and quietly wait for me to call on you when you are either responding to a question or have a question to ask. I want the rest of the class to listen/respect all questions because it is likely that you have the same question(s). * If I do not see your hand immediately, write the question down on you paper.   OUTSIDE OF CLASS   * Email, use classroom website forum, and/or stop by my room (room 122) during planning or office hours. | | | | | | | | |
| **A**  **C**  **T**  **I**  **V**  **I**  **T**  **Y**  (Note: Activities may vary from day to day) | UNDERSTANDING TOPICS COVERED  I will often times ask the class if they understand concepts that are being covered in class. Respond with a “thumbs up” if you are comfortable with the concept and a “thumbs down” if you feel uncomfortable with the concept and need more practice with it. (NOTE: if we move on because of a majority of students understand… feel free to stop by after class and schedule a meeting with me) | | | | | | | | |
| Students will work on notes, tasks, and activities presented by teacher. Verbal and written response to teacher presented material. Students are to complete as much of the assignment as possible during the given time.  If you finish early, sit quietly and begin working on one of the following:   1. Review Notes/Assignments 2. Study for Test/Quiz 3. Complete tonight’s homework 4. Work on extra problems in the book--- extra credit 5. Work on Brain Twister Puzzles | | | | | | | | I will give attention signal followed by directions. I will then give you a time period to finish the current assignment. Once this period ends, transition quietly and quickly to new area. |
| **M**  **O**  **V**  **E**  **M**  **E**  **N**  **T** | You are expected to stay in your seat.  \*If emergency arise, you will need teacher permission for movement and need to sign hall pass folder. | You can leave your seat to sharpen pencil, use restroom (sign hall pass), get a drink of water, or anything assignment related. | | You can leave your seat to sharpen pencil, use restroom (sign hall pass), get a drink of water, or anything assignment related. | | | You are expected to stay in your seat.  \*If emergency arise, you will need teacher permission for movement and need to sign hall pass folder. | | You are expected to move quickly and quietly. |
| **P**  **A**  **R**  **T**  **I**  **C**  **I**  **P**  **A**  **T**  **I**  **O**  **N** | Students are to be looking at the teacher, raise hand with something to say, answer questions when called on/signaled to, and do as teacher directs.  Students should not be talking to another student, getting out of seat without permission, looking away from teacher, not following directions, not raising hand, sleeping, and not answering questions when asked. | Students are to be looking at paper, writing or doing what the task requires, and talking only to help or get help.  Students should not be talking about anything besides the assignment, talking during movement, wandering around the room, looking somewhere other than at work, sleeping, or not doing task | | Students are to be looking at paper or talking with others in their group, writing or doing what the task requires, talking only with those in their group, seeking help within group before asking teacher, and staying with group until finished.  Students should not be refusing to work with group members, not working on task, talking with others outside of group, leaving group before you’re finished, walking around the room, or working on other assignments.  **(0% on task after warning)** | | | Students are to be looking at paper, writing/doing what the task requires, not talking, and not leaving seat without permission.  Students should not be talking to another student, getting out of their seat, looking at others papers, not working on task, and not looking at paper. | | Same as above. |
| **SUCCESS** | | | | | | | | | |

7.) WHEN I NEED YOUR ATTENTION

1. When I need your attention I will stand at the front of the class and raise my hand and say, “Class, your attention please.” You are then to put all materials down, look at me with no talking, and I will proceed with instructions/directions.

8.) ASSIGNMENTS

1. WHERE TO FIND ASSIGNMENTS AND/OR OBJECTIVES
2. You will find assignments, objectives, and daily schedule on the whiteboard.
3. HOMEWORK/ASSIGNMENTS
4. Homework will be assigned nightly. They will not be taken up for grades. However, to shift the responsibility on you, you can expect daily homework quizzes. There may be times I allow you to use your homework quizzes on the quiz themselves. The only way to get better at math (and most things in life) is to practice… A LOT!!!!
5. NOTEBOOK
6. You are expected to keep a notebook with the following tabs in this order: Notes, GOT MATH Openers, Homework, Quizzes, Labs, and Tests (This Syllabus should be in the front!)
7. The Notebooks will be checked at the end of a unit and graded based on organization, completion of notes, and graded tests/quizzes being present. It is an important aspect of life to be organized. Plus you may be able to use this in future math courses!
8. LABS
9. Short Labs/Activities will require that you answer basic questions and summarize findings from activities that are completed in class. An outline for these reports will be handed out at the time of the first short lab activity.
10. Formal Lab reports will be required on some of the labs in class. An outline for these reports will be handed out at the time of the first formal lab report.
11. TESTS/QUIZZES
12. Tests will always be announced in advanced and occur at the end of a unit. A review will occur during the class preceding the test. Missed tests must be made up before or after school on a date scheduled with the instructor.
13. There will be daily homework quizzes administered every day. This quiz will consist of one or two of the homework problems assigned in the previous classes and you will have 10-15 minutes to finish the quiz. The purpose of this assessment is to ensure that you are staying current with your daily assignments.

9.) GRADE

1. Below is what assignments that will be counted as a grade and how much of your grade they will be worth:
2. *Formative* (30% of final grade)
   1. Daily Participation/Assignment Check (10 pts/week) ------------------------7.5 % final grade
   2. Daily Homework Quizzes (40 pts/week) ---------------------------------------22.5% final grade
3. *Summative* (50 % of final grade)
4. Summative Quizzes (10 pts/week)-----------------------------------------------6.25% final grade
5. Unit Projects/Labs (20 pts)---------------------------------------------------------6.25% final grade
6. Unit Notebook (20 pts) -------------------------------------------------------------6.25% final grade
7. Unit Tests (100 pts) ----------------------------------------------------------------31.25% final grade

1. *EOC* (20% of final grade)
2. Below Burgin High’s grading scale. Note that each nine (9) weeks grade will count for 20% of the final grade.

A 90-100 %

B 80 -89 %

C 70-79 %

D 60-69 %

F 0-59%

10.) END-OF-BLOCK CLASS DISMISSAL

1. At the end of the class period, clean up your desk area and remain quietly in your seat until you are dismissed by the instructor. You will not be allowed to leave until the room is clean, quiet, and you are dismissed by ME!!!

11.) IF I AM OUT OF THE CLASSROOM/SUBSTITUTE

1. Students are to remain on task. Classroom rules and procedures are followed as they continue their work. The daily routines and objectives will be posted on the board and all assignments will be placed in a folder for the day (sub). The teacher next door is available for help if needed.

\*\*\* If a sub writes your name down, it is an automatic call home.

12.) TECHNOLOGY

1. I want all cell phones **off** and **placed out of sight** (backpack, pocket, etc.) unless I allow them during a lesson. If you are caught using your phone, I will give you a verbal warning to put it away. It will be taken from you for the rest of the period and returned at the end of class. Continual use will lead to the phone being turned into the office. Refusal to turn the phone over will result in a referral (defiance).
2. I want all phone chargers put away. You may not charge your phone in my classroom.

**Mr. Terrell’s Classroom Expectations and Guidelines**

Classroom Guidelines and Expectations

1. Be Responsible
   1. Enter room quietly and be in your assigned seat and working on the “GOT Science???” assignment before the tardy music stops.
   2. Come to class with all appropriate materials (textbook, notebook, paper, pens/pencils, calculator, etc.) and take them with you when you leave.
2. Be Respectful
   1. Treat the teacher, classmates, school, materials, and yourself with dignity and respect.
   2. Follow all directions the first time that they are given.
   3. Follow all school Rules, Regulations, and Policies in the student handbook and all classroom procedures.
3. Be Positive
   1. Be polite, patient, and helpful to others.
4. Be Honest
   1. Act with integrity and truthfulness. This means no lying, stealing, and to take responsibility for your mistakes.
5. Be Your Best
   1. Give 100% effort at all times and be a model for others.

Consequences

1. Verbal Warning
2. Meeting/Discussion after class
3. Completion of My Action Plan and/or Call Home (Parent Call Home)
4. Disciplinary Referral

\*\* Severe Disruptions (Fighting, Cursing/Profanity, Bullying, Classroom Disruptions, Throwing Things, Cheating/Plagiarism, Defiance, or anything I deem to be unacceptable) will result in immediate removal from class and immediate disciplinary referral. See Discipline Section in Student Handbook.

Rewards

* Positive praise (daily)
* Positive referrals (random)
* Fist bumps/High fives (daily)
* Positive Notes Home (random)
* Student of the Month (monthly)

Dear Parent and/or Guardian,

Welcome to Physics!!! I am looking forward to being your child’s high school science teacher this year. I graduated from EKU in 2009 with a B.S. in Physics and from EKU in 2012 with a M.A.T. Secondary Physics. During the 2011-2012 school year, I taught in a small western Kentucky town called Cloverport. It was here that I taught physics, biology, physical science, astronomy, chemistry, earth/space science, and forensic science. My wife and I spent the 2012-2013 year doing missionary work in Haiti. It was here that I worked daily with Haitian teenage boys on transitioning to adulthood and tutoring them in math/science. The time spent in Haiti taught me many life lessons I plan to bring to the classroom. Last year (2013-2014) I taught Advanced Physics at Paul Laurence Dunbar.

My goal as a teacher is to treat every child as if they were my own child. I have high expectations for all of my students, have a high value for what each will bring to our classroom, and am always available for questions whether school or life related (before school, during planning periods, or after school). I want to not only help students discover math, but also help teach them valuable life lessons in order to prepare them for life outside of school.

I am here to team up with you to ensure that your child is successful. I encourage you to review this syllabus with your child (routines, procedures, expectations, guidelines, grading policy, etc.) and stay up to date with your child’s assignments, grades, and questions that they may have. I have implemented multiple resources this year to assist you in doing so. You can find each of them below. If you ever have any questions, do not hesitate to contact me. I look forward to working with you and your child during this school year!

**Email**: [chad.terrell@burgin.kyschools.us](mailto:chad.terrell@burgin.kyschools.us)

**Twitter**: <https://twitter.com/burginterrell>

**Website**: [www.burginterrell.weebly.com](http://www.burginterrell.weebly.com)

**Grades** **(Infinite Campus):**

<https://infinitecampus.kyschools.us/campus/portal/burgin.jsp?status=portal>

Sincerely,

Chad Terrell

High School Math/Physics Teacher

Head Girls Basketball Coach

Burgin Independent High School

PLEASE COMPLETE, CUT, AND RETURN INFORMATION BELOW (1st ASSIGNMENT GRADE)

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I have read the syllabus and guidelines for Coach Terrell’s Physics class. I understand it is my responsibility to follow them over the course of the 2014-2014 school year.

Student Name (please print): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Parent Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_