

## Forsyth County Schools Course Syllabus 2024 - 25

COURSE TITLE: International Baccalaureate Physics – Higher Level

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**Course Description:** As one of the three natural sciences in the IB Diploma Programme, physics is concerned with an attempt to understand the natural world; from determining the nature of the atom to finding patterns in the structure of the universe. It is the search for answers from how the universe exploded into life to the nature of time itself. Observations are essential to the very core of the subject. Models are developed to try to understand observations, and these themselves can become theories that attempt to explain the observations. Besides leading to a better understanding of the natural world, physics gives us the ability to alter our environments. HL physics enables students to constructively engage with topical scientific issues. Students examine scientific knowledge claims in a real-world context, fostering interest and curiosity. By exploring the subject, they develop understandings, skills and techniques which can be applied across their studies and beyond. Integral to the student experience of the HL physics course is the learning that takes place through scientific inquiry both in the classroom and the laboratory

**Standards:** *Course Standards can be found on p. 130* <https://ibphysics.org/wp-content/uploads/2016/01/ib-physics-syllabus.pdf>

**Required Assignments:** *Reading assignments and homework problem sets will be given via Kognity. Students will be required to complete an Internal Assessment that will be graded and submitted as part of their IB Test score.*

**Availability for Extra Help:** *IF and Tuesdays 8-8:15 and 3:45-4*

**Makeup Work:** *Make up work is defined as work assigned during a student's absence, not work assigned prior to an absence. The student has five (5) school days upon returning to school to complete make-up work. The teacher has the discretion to grant a longer period to make up work, if there are extenuating circumstances.*

### Grading Calculations:

**Course Average** = 50% (1<sup>st</sup> Sem. Course Work) + 50% (2<sup>nd</sup> Sem. Course Work)

1<sup>st</sup> and 2<sup>nd</sup> Semester Course Work = 75% Summative + 25% Formative

### Grading Policy:

A = 90 – 100

B = 80 – 89

C = 70 – 79

Failing = Below 70

*Formative Assessments include, but are not limited to homework, class work, practice tests, rough drafts, and sections of projects/research papers/presentations.*

*Summative Assessments include, but are not limited to unit tests, final projects, final essays, final research papers, and final presentations.*

**Learning Resources/Textbook(s):** All learning resources, both print and digital, are meant to support and enhance the student learning experience of this class. Below are the names of the textbooks and websites that will be used in this course. Some of the web-based resources require parent permission per federal regulations. Federal laws that guide parent permission requirements are as follows:

- **Children's Internet Protection Act (CIPA):** The school is required by CIPA to have technology measures and policies in place that protect students from harmful materials including those that are obscene and pornographic. Any harmful content contained within inappropriate sites will be blocked. <http://fcc.gov/cgb/consumerfacts/cipa.html>
- **Children's Online Privacy Protection Act (COPPA):** COPPA applies to commercial companies and limits their ability to collect personal information from children under 13 years of age. No personal student information is collected for commercial purposes. <https://www.ftc.gov/tips-advice/business-center/guidance/complying-coppa-frequently-asked-questions-0>
- **Family Educational Rights and Privacy Act (FERPA):** FERPA protects the privacy of student education records and gives parents the right to review records. Under FERPA, schools may disclose directory information in certain circumstances. <http://www2.ed.gov/policy/gen/guid/fpco/ferpa>

Please review the resource list. Each website related to the curriculum resources is provided along with their privacy policies. Should you have any questions regarding these resources immediately contact the course teacher via email or phone.

Name of Resource*	Hard copy/Website	Privacy Policy
Glencoe <i>Physics: Principles &amp; Problems</i>	Class set of textbooks	Not applicable
Explore Learning	Digital supplemental material (accessed via ClassLink)	<a href="https://www.explorelearning.com/index.cfm?method=Controller.dspPrivacy">https://www.explorelearning.com/index.cfm?method=Controller.dspPrivacy</a>
Newsela	Digital supplemental material (accessed via ClassLink)	<a href="https://newsela.com/about/privacy-policy/">https://newsela.com/about/privacy-policy/</a>

*\* The following resources are county approved. These resources may vary by school due to sequencing, pacing, curriculum design, and/or individual needs of students.*

Parent Initial for Approval **	Name of Resource	Website	Privacy Policy
	Phet Interactive Simulations	<a href="https://phet.colorado.edu/en/simulations/filter?subjects=physics&amp;type=html&amp;sort=alpha&amp;view=grid">https://phet.colorado.edu/en/simulations/filter?subjects=physics&amp;type=html&amp;sort=alpha&amp;view=grid</a>	<a href="#">Policy</a>
	M.I.T. OpenCourseware	<a href="#">M.I.T. Science, Technology, &amp; Society</a>	<a href="#">Privacy Policy</a>

	Kognity	<a href="https://kognity.com/its-about-time/">https://kognity.com/its-about-time/</a>	<a href="#">Privacy Policy</a>
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***\*\* The following resources are web-based resources that require parent permission. By signing the syllabus, the parent is approving these resources. Should you have any questions regarding any of these classroom resources, please contact your student's teacher via email.***

I, \_\_\_\_\_, have read this course syllabus and approve of its contents. I agree to allow my student to use each of the classroom resources listed in the learning resource section. I will support my student following the classroom expectations outlined in this course syllabus. I agree that I am the person who is legally allowed to consent for my student whose name is listed below.

\_\_\_\_\_  
Student's Name (Print)

\_\_\_\_\_  
Parent's Name (Print)

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

\_\_\_\_\_