

About Your Study Plan

This Study Plan is your syllabus for the American Board program. We encourage you to use the recommended resources to target preparation to your needs and goals. There will be hyperlinks throughout this document. Please make sure that you visit the relevant pages to access all of the resources. Your commitment to great teaching begins here.

Preparing to Pass

American Board is committed to making sure you are the best possible teacher. We will provide you with study tips to get ready for the exam and the content and resources to review the material.

Think of the Snapshot below as an overview for what you need to know. For more detail in each topic, review the exam [standards](#). The ABCTE exams are based on this blueprint, so consider the syllabus for what you want to study.

Your Materials

- **Standards:** a list of everything that might be on the test.
- **Study Plan:** your syllabus with links to what you need to study for each section.
- **Study Materials:** an overview course on the topics you will be tested on.
- **Practice Exam/Section Quizzes:** a sample test questions and solutions.

Physics Exam Snapshot

Time Allowed	240 minutes
Format	Multiple Choice
# of Questions	125
On-Screen Exhibits	Scientific Calculator & Formula sheet
Passing Score	Proficient: 258/500 Distinguished: 344/500

Exam Summary	Content Domains	Percentage of Exam
	General Science Knowledge	6%
	Scientific Investigation	7%
	Classical Mechanics	24%
	Fluids and Thermodynamics	12%
	Electricity and Magnetism	24%
	Waves and Optics	15%
	Modern Physics	12%

About This Exam

The American Board for Certification of Teacher Excellence believes that highly skilled physics teachers should possess a comprehensive body of scientific knowledge that is research-based and promotes student achievement.

The physics exam is a rigorous assessment of a candidate’s knowledge and application of general physics. The topics assessed are characteristically covered in introductory college-level physics courses, although some more advanced questions are included, as teachers must hold a more sophisticated understanding of physics content than that presented to their students.

How to use American Board Practice Tests

If you have chosen to use our practice tests, you may have already used the quizzes to get a better idea of where your strengths and weaknesses are. There are two full-length exams that we suggest you use in *testing mode* as a mid-term and final to work on your timing and endurance. You can use them again in *explore mode* to identify distractors.

The Study Plan:

Your study plan includes direction on how to use ABCTE's resources. We also include recommended resources to aid in your mastery.

This plan was designed for a 9 month period (4 months for Professional Teaching Knowledge (PTK); 4 months for the subject matter; 2 weeks to take each test) in which most people are able to complete the program. Many have completed the program in a shorter amount of time.

Area of Study	Required Resources	Recommended Resources
Domain 1: Scientific Investigation Domain 2: General Science Knowledge	Review the specific Physics standards HERE The corresponding sessions can be found in your American Board Study Materials Scientific Knowledge ☐ Scientific Method ☐ Measurement and Analysis ☐ General Science ☐ Review	Web Resources ☐ Easyphysics.net ☐ The Physics Classroom ☐ Water Science School ☐ Periodic Table ☐ Introductory Physics Notes Books ☐ The Practical Geologist ☐ Chemistry: Concepts and Problems ☐ Physics Demystified

Your Notes:

Study Tip: Use a science survey test

A basic survey text on physics like the Idiot's Guide to Physics is recommended as a starting point. If you have another survey book from college, or you have access to different text from your library, that is perfectly fine. It is important that you have access to a survey book because it will assist in covering the various domains of the exam.

Study Tip:

One effective way of using the practice quizzes is to look at the incorrect answer choice before looking at the correct explanation to see if you can understand why those options are wrong. If you can understand how a test maker uses distractors, you will be able to eliminate wrong answer choices faster on test day.

Area of Study	Required Resources	Recommended Resources
Domain 3: Classical Mechanics ☐ Topic 1: Kinematics and Dynamics ☐ Topic 2: Work, Energy, Power and Momentum ☐ Topic 3: Rotational Motion ☐ Topic 4: Universal Gravitation	Review the specific Physics standards HERE The corresponding sessions can be found in your American Board Study Materials Classical Mechanics ☐ Kinematics ☐ Dynamics I ☐ Dynamics II ☐ Energy and Work ☐ Momentum and Impulse ☐ Angular Kinematics and Dynamics ☐ Angular Momentum and Rotational Kinetic Energy ☐ Universal Gravitation and Kepler's Law ☐ Gravitational Potential Energy ☐ Motions of the Sun and Moon ☐ Review	Web Resources ☐ American Board Physics Exam Formulas and Constants ☐ Khan Academy: Physics Books ☐ Engineering Mechanics, Dynamics ☐ Conceptual Physics with Practicing Physics Workbook

Your Notes: