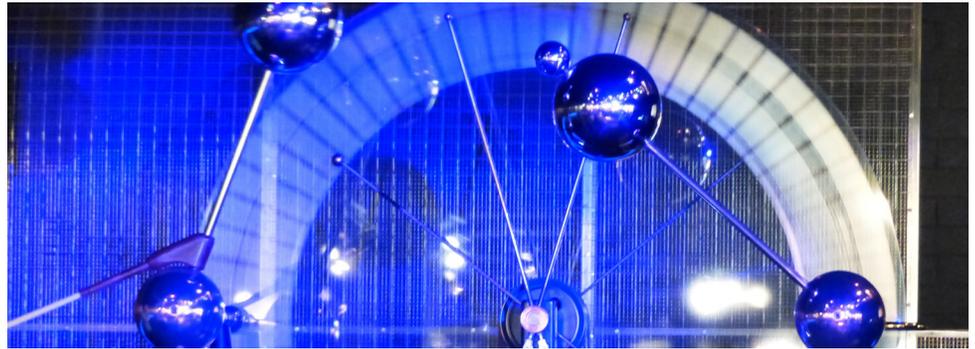


Online Physics Course

WHRO Education. A better solution for your online courses.

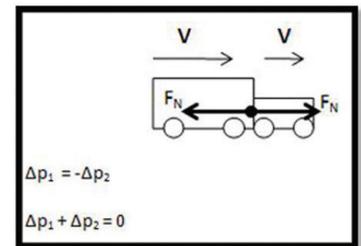
Online Course List:

Algebra I
Algebra II and Trigonometry
Astronomy
Biology
Chemistry
Earth Science
English 9
English 10
English 11
English 12
Economics and Personal Finance
Geometry
Health/PE 9
Health/PE 10
Math Analysis
Oceanography
Online Teaching Methodology
(professional development)
Physics
Virginia & U.S. History
Virginia & U.S. Government
World Geography
World History I
World History II



This course introduces students to a powerful way of thinking about the physical world with which they interact every day and provides a solid foundation on which students can build to further explore the physical sciences. Students learn to apply math skills to analyze the motion of objects, the behavior of electric charges and the phenomena of waves, among other things. Students experience hands-on activities, applications, group interactions and various technologies throughout this course. Major units of study include:

- Describing Motion
- Forces and Newton's Laws
- Motion in Two Dimensions
- Work and Energy
- Conservation of Energy
- Impulse and Momentum
- Waves, Sound and Light
- Electricity and Circuits
- 20th Century Physics



A Better Model

Why “rent” course seats year after year from for-profit online course providers when you can own your own online courses? Developed by WHRO Education, a well-respected, not-for-profit, Virginia-based, educational media organization, our courses are:

- ✓ Created by Virginia educators for Virginia educators
- ✓ Fully aligned to Virginia's Standards of Learning
- ✓ Textbook independent
- ✓ Teacher-led
- ✓ Modular

Once licensed, the course is yours to keep and you are free to customize, modify, re-arrange, and add content from local sources or from digital content repositories like eMediaVAsm. You can even use the course as an e-textbook.

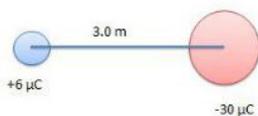
A Better Process

All WHRO Education Online Courses are developed using a sophisticated process involving:

- ✓ Project Managers
- ✓ Instructional Designers
- ✓ Content Experts
- ✓ Content Reviewers
- ✓ Graphic Artists
- ✓ Professional Audio, Video, Mobile Device, and other Rich Media Producers
- ✓ Assessment Specialists

Coulomb's Law

$$F_E = \frac{kQ_1Q_2}{r^2}$$



$$F_E = \frac{\left(9 \times 10^9 \frac{\text{N} \cdot \text{m}^2}{\text{C}^2}\right) (-30 \times 10^{-6} \text{ C})(+6 \times 10^{-6} \text{ C})}{(3 \text{ m})^2}$$



Better Flexibility, Service and Support

The courses can be loaded into your existing learning management system (i.e. Blackboard™, Desire2Learn®, Moodle™, and others) and can easily be used in a variety of ways:

- ✓ As a stand-alone, fully online offering
- ✓ To support face-to-face instruction in a “blended” environment
- ✓ As a “flipped” class

And to make your life even easier, we have a convenient Annual Support and Maintenance program that's budget friendly and provides regular course revisions and access to support personnel.

A Better Product

WHRO Education Online Course elements include:

- ✓ Rich media infused, purpose-built content
- ✓ Hundreds of digital learning objects
- ✓ Self-checks, interactive reviews, projects, and discussion boards
- ✓ A complete range of instructional and assessment modules

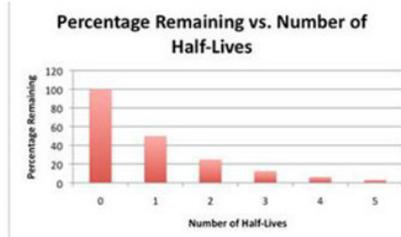
“We have always developed our own course content, but recently decided to preview the courses from WHRO. We were immediately impressed by the quality instructional design, the content alignment to Virginia standards, and the instructor resources. We have now started using the courses and know that we could not have developed a comparable product in house for the same cost.”

- Gina Jones
Coordinator
Prince William County
Virtual High School

Half-Lives

$$N = N_i \left(\frac{1}{2}\right)^n \text{ of half-lives}$$

After 1 hour, 1/2 left.
After 2 hours, 1/4 left
After 3 hours, 1/8 left
After 4 hours, 1/16 left
After 5 hours, 1/32 left



$$N = N_i \left(\frac{1}{2}\right)^{10} = \frac{1}{1024} N_i$$

“The online courses created in collaboration with WHRO and HRETA represent exemplary instructional design that provides the interactivity students need in order to be successful!”

- James T. Roberts, Ph.D.
Superintendent
Chesapeake Public Schools

Who is WHRO?

In 1961, the Norfolk and Hampton school board chairs started *Home Room One* to explore the use of broadcast television in public education. Today, WHRO is owned by 19 public school divisions in eastern Virginia and has pioneered a variety of educational technology programs and services over the last 50+ years. Current services include eMediaVAsm, Virtual Virginia operations, online course and digital content production, and Virginia's PBS TeacherLine™. WHRO is also the local PBS™ and NPR™ affiliate and operates numerous other educational and cultural radio and television channels.

To learn more about our online courses and arrange a preview, email us at education.solutions@whro.org or call us at 757.889.9447



Learn more at education.whro.org