



MONTEREY
INSTITUTE
FOR TECHNOLOGY
AND EDUCATION

National Repository Of Online Courses (NROC)

Project Overview

Gary Lopez, Ph.D.

Executive Director

Monterey Institute for Technology and Education

NROC

NATIONAL REPOSITORY
of ONLINE COURSES

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course?](#)

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The National Repository of Online Courses (NROC) is a growing library of high-quality online courses for students and faculty in higher education, high school and Advanced Placement®.



FOR ACADEMIC INSTITUTIONS AND FACULTY



An online community of educators, designers, technologists, and administrators working together to develop high-quality online education.

FOR STUDENTS



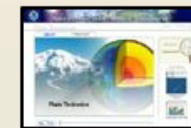
A free, public website for high school and college students that offers NROC multimedia correlated to most major textbooks.



WHAT'S NEW IN THE REPOSITORY



AP History Lesson 63



NOAA Plate Tectonics



AP Calculus

[View Repository](#)

Open Educational Resources

THE WILLIAM AND FLORA HEWLETT FOUNDATION




OPEN EDUCATIONAL RESOURCES

High Quality Educational Content



OER Providers



The best stuff on the web to help you with your homework and studies

Help About Login

Announcements Welcome to HippoCampus ...

Welcome

Thank you for visiting HippoCampus!

We are dedicated to bringing you great multimedia and course materials that can help you with your homework and studies.

← To get started, simply click on a one of the areas of study in the Subjects box.

There are two ways you can help keep HippoCampus free for everyone. First, if you are always adding new material. Second, tell all of your friends to check us out. The more the merrier!

Thanks for your help.

Don't show this again.

Subjects

- ▶ Algebra
- ▶ American Government
- ▶ Biology
- ▶ Calculus
- ▶ Environmental Science
- ▶ Physics
- ▶ Religion
- ▶ US History

Instructors
Create a custom HippoCampus page for your students

CONNEXIONS

Contact Us | Report a Bug

Home Content About Us Help

You are here: Home » Sharing Knowledge and Building Communities

Connexions is:
a place to view and share educational material made of small knowledge chunks called modules that can be organized as courses, books, reports, etc. Anyone may view or contribute:

- **authors** create and collaborate
- **Instructors** rapidly build and share custom collections
- **learners** find and explore content

More about us ...

FEATURED CONTENT

Corporate Governance

"This course takes an interdisciplinary approach to ethics in business and provides modules in Ethical Leadership, Ethical Decision-Making, Social Responsibility, and Corporate Governance. This course will culminate in an Ethics Bowl competition in which students will practice ethics..."

FIND CONTENT
3910 reusable modules woven into 210 collections.

Search Content

or browse by ...

- Subject**
 - Arts
 - Business
 - Humanities
- Language**
- Popularity**
- Title, author, etc.**
 - Mathematics and Statistics
 - Science and Technology
 - Social Sciences

CREATE CONTENT
Creating content in Connexions is as easy as 1, 2, 3:

- 1 Get an account and log in to your
- 2 Make a module from scratch or
- 3 Publish your works, sharing them

AUTHOR LOGIN

Username
Password


- Get an account
- Forgot your password?

SPOTLIGHT

User feedback

"Your concise explanation of the Likelihood Ratio Test in a Bayesian context has been exceptionally useful. I am a student at Brigham Young University, and am working on a paper describing the asymptotic behavior of the statistic. Your page has been very helpful; its presence on..."

COURSE LIST | ABOUT OCW | HELP | FEEDBACK



MIT OPEN COURSEWARE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

We invite you to view all the MIT courses available at this time.

Search

» Advanced Search

AVAILABLE COURSES
Find individual course listings on the following MIT OCW Department pages, or view a complete course list.

- ▶ Aeronautics and Astronautics
- ▶ Anthropology
- ▶ Architecture
- ▶ Athletics, Physical Education and Recreation
- ▶ Biological Engineering
- ▶ Biology
- ▶ Brain and Cognitive Sciences
- ▶ Chemical Engineering
- ▶ Chemistry

Welcome to MIT's OpenCourseWare:
a free and open educational resource (OER) for educators, students, and self-learners around the world.

MIT OCW:

- Is a publication of MIT course materials
- Does not require any registration
- Is not a degree-granting or certificate-granting activity
- Does not provide access to MIT faculty

Learn more about MIT OCW...

Partners in Sharing

MIT OpenCourseWare is grateful for the support of Ab Initio Software Corporation.

Ab INITIO
Ab Initio and OpenCourseWare:
Built on fundamentals

"It's always useful to see variations of classic physics experiments or to discover new ones. In addition, I use the OCW course materials as a reference whenever I have doubts or questions about various topics in physics."
— Horatius Pop, educator in Warsaw, Poland
Read more World Reaction...

» COURSES » ABOUT OCW » HELP » FEEDBACK

Discover all Learn more Answer Tell us what

OCW



A library of high-quality, multimedia rich online courses for high school, Advanced Placement[®], and higher education students and teachers.

NROC Library - 2009



NATIONAL REPOSITORY
of ONLINE COURSES

College Course Foundations

US History I
US History II
American Government
Introductory Physics I (algebra-based)
Introductory Physics II (algebra-based)
General Physics I (calculus-based)
General Physics II (calculus-based)
Introductory Calculus I
Introductory Calculus II
General Calculus I
General Calculus II
Environmental Science
Religions of the World
Elementary Algebra
Psychology
Calculo General I (Spanish)
Calculo General II (Spanish)
Statistics for the Social Sciences

Advanced Placement Course Foundations

AP Environmental Science
AP Physics B I
AP Physics B II
AP Physics C I
AP Physics C II
AP US History I
AP US History II
AP US Government and Politics
AP Calculus AB I
AP Calculus AB II
AP Calculus BC I
AP Calculus BC II
AP Biology

High School Course Foundations

College Prep Physics I
College Prep Physics II
Algebra 1a
Algebra 1b

Also in Development

Non-Majors Biology
Curso de Algebra 1A (Spanish)
Curso de Algebra 1B (Spanish)

Coming in 2010

Algebra 1 (NEW)

Quality

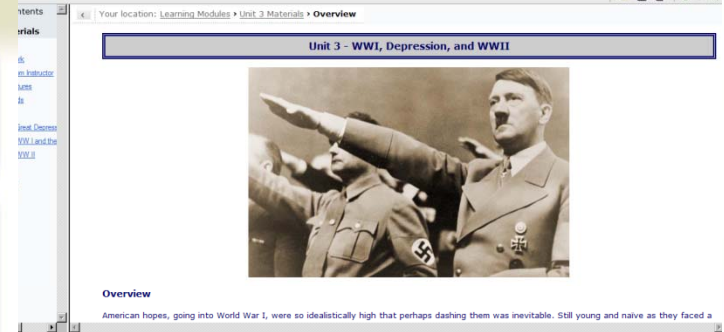
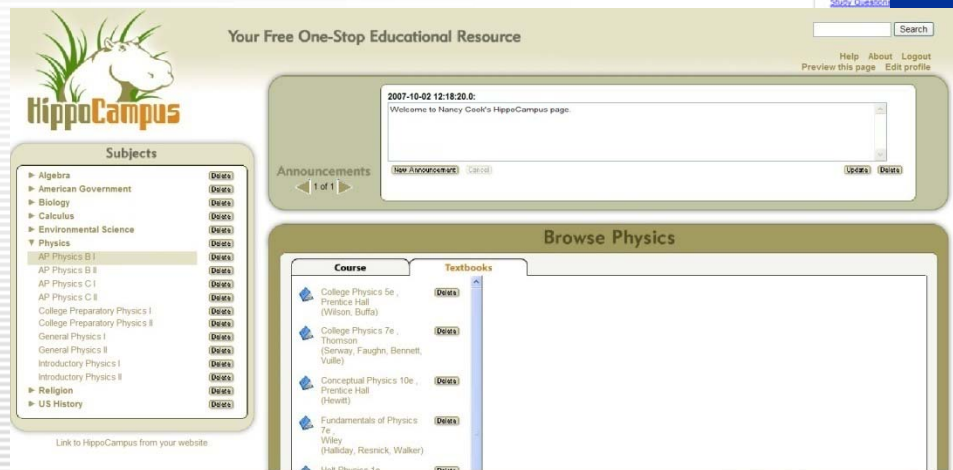
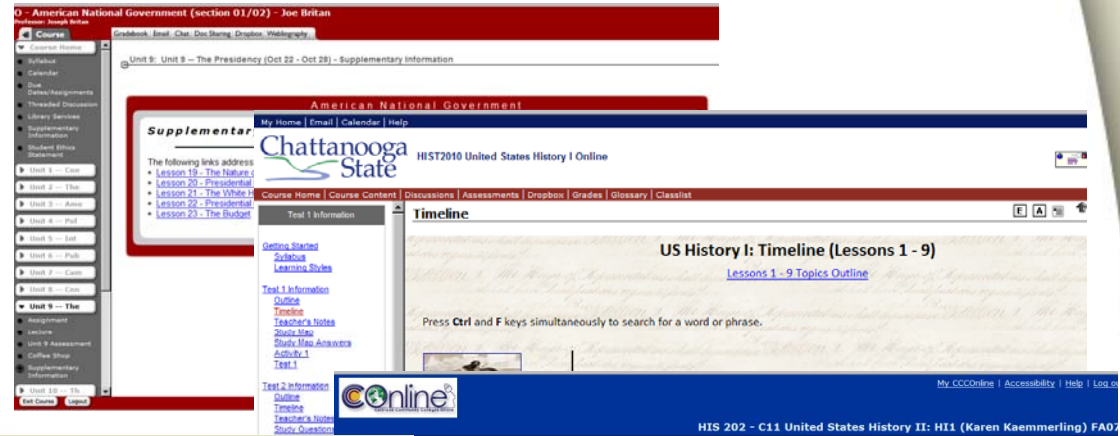
- Media rich
- Editorially rigorous
- Instructionally sound

The collage features three distinct educational materials:

- Calculus Lesson:** Titled "Lesson 17: Differentiation Rules", it includes a portrait of Isaac Newton and a graph showing the relationship between a function and its derivative. The text explains that the derivative of a function at a point is the slope of the tangent line to the curve at that point.
- Nitrogen Cycle Diagram:** A cross-sectional diagram of the Earth's surface and subsurface. It shows the flow of nitrogen through the atmosphere, soil, and living organisms. Key components labeled include Atmosphere, Fertilizer, Ammonia, Nitrogenous wastes, Plants and animals, Nitrite, and Nitrate. Arrows indicate the direction of nitrogen movement between these components.
- AP US History Lesson:** Titled "Lesson 63 - The Home Front", it features a timeline with markers for "Military and Economic Mobilization", "Women and Minorities", "Wartime Propaganda", "Japanese Internment", and "Timeline". The main content area is titled "Japanese Internment" and includes a presentation and text format. A large image shows a man in a military uniform sitting in a field. To the right, there are links to "Explore" resources, including "Japanese Internment vs. September 11th", "Japanese Internment Timeline", and "Japanese Internment".

Flexible

Can be used within popular CMS's and repositories.



Customizable by a teacher, a district, or a state.

Curricular

Correlated with
state standards
and popular
textbooks.

The screenshot shows the HippoCampus website interface. At the top, there is a navigation bar with links to CNN, WebMail, Metacritic, Weather.com, NWS, KS Angler, KDWP, Mac Rumors, RainGauge, AAPL, KFS, and Apple. Below this is the HippoCampus logo and the tagline "Your Free One-Stop Educational Resource". A search bar and a "Search" button are present. An "Announcements" section displays "Welcome to HippoCampus...". The main content area is titled "Browse Algebra" and features tabs for "Course", "Textbooks", and "Standards". Under the "Course" tab, there is a list of states: Oregon, California, and Michigan. A "Course View" dropdown menu is open, showing a hierarchical list of units and chapters: Unit 1 (Chapter 1-9), Unit 2 (Chapter 4-5), Unit 3 (Chapter 6-9), and Unit 4 (Chapter 10-11, Course Errata). To the right of the course list, there is a "Textbooks" section with a "Constitutional Beginnings" heading and a list of resources: Readings (Objectives, Readings), Lessons (Lesson 1 - American Democracy, Lesson 2 - English and Enlightenment Traditions), Assignments (Key Terms, Writing Assignment, Discussion Question), and Assessments (Chapter Test, Answer Key).

Complete
teaching
materials.

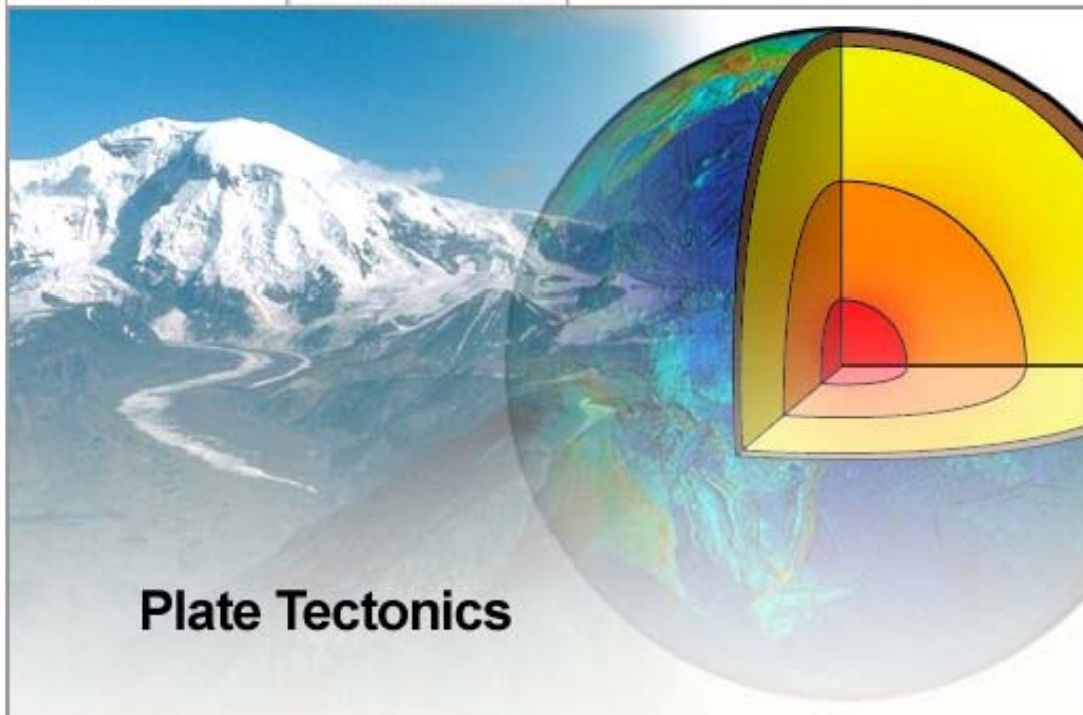


Plate Tectonics

[Credits](#) [Printable Version](#)

Lesson

Global Impact



Play Pause

Loaded: 71%

Explore

Plates of the Earth



Activities



Drilling for Core Samples



Earthquakes and Plates



Juan Varona

El Teorema del Valor Principal

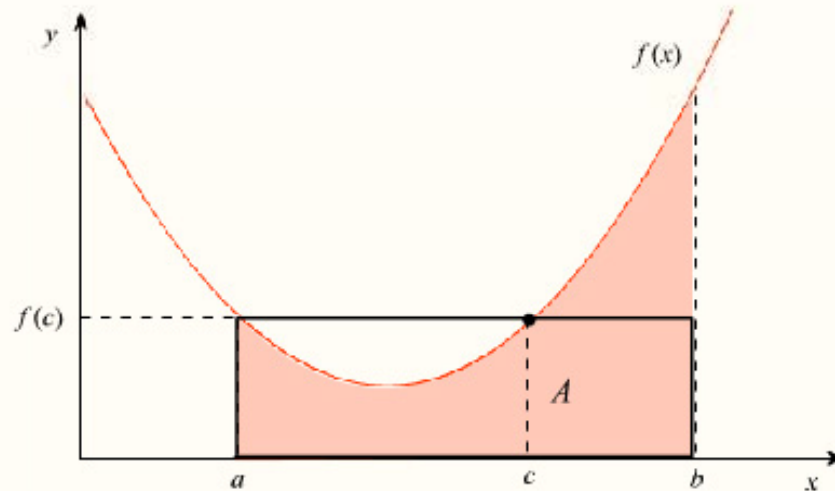
Aquí tenemos el gráfico de una función $f(x)$ que es continua en el intervalo $[a,b]$.

Podemos determinar el área sobre la curva integrando la función de a a b .

Ahora supongamos que definimos un rectángulo con su base dada por b menos a , y su altura dada por $f(c)$, donde c está en el intervalo $[a,b]$.

Podemos usar estos valores para calcular el área del rectángulo.

menú



El área bajo la curva en el intervalo $[a,b]$ es dada por:

$$A = \int_a^b f(x) dx$$

El área del rectángulo es dada por:

$$A_{\text{rec}} = f(c) \cdot (b - a)$$



Your Free One-Stop Educational Resource

 Search

[FAQ](#) [Forum](#) [Help](#) [About](#) [Login](#)

Announcements

- ### Subjects
- ▶ Algebra
 - ▶ American Government
 - ▶ Biology
 - ▶ Calculus
 - ▶ Calculus (Spanish)
 - ▶ Environmental Science
 - ▶ Physics
 - ▶ Psychology
 - ▶ Religion
 - ▶ Statistics
 - ▶ US History

Instructors

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Link to HippoCampus from your website

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Find out more about HippoCampus [here](#).

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Center for Distributed Education
On-line courses offered through eLearn.

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Open Educational Resources

You Can Learn Virtually Anything®

www.mivu.org

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Google Key Word Ranking

| KEY WORD | RANK | TOTAL HITS |
|-------------------------------------------------|-----------|----------------------|
| Free homework help | 18 | 3,020,000,000 |
| Free online homework help | 12 | 7,610,000 |
| Free us history homework help | 1 | 247,000 |
| Free environmental science homework help | 1 | 112,000 |
| Free American government homework help | 2 | 225,000 |
| Free biology homework help | 3 | 240,000 |
| Free physics homework help | 10 | 241,000 |
| Free algebra homework help | 11 | 391,000 |
| Free calculus homework help | 16 | 141,000 |



NROC Network: Institutional Membership

NROC COMMONS

MATHEMATICS

NATURAL SCIENCES

SOCIAL SCIENCES

HUMANITIES

SUPPORT



ONLINE COMMUNITY

A project of the Monterey Institute for Technology and Education

NROC COMMONS

What's New

Welcome

What's New

Explorer

Login

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What's New

Explorer

Search

News and Columns

Resources

Posts/Discussions

Calendar

Web Meeting

NROC Blog

My Account

MITE Website

Highlights



NROC in the NEWS



NROC is making news. Find out what people are talking about.



CONTENT DEVELOPMENT AND IMPROVEMENT



Find out about NROC's efforts to improve online education for everyone.



NROC FEATURES



Check out the Best of NROC. Monthly featured teacher, featured member school and content highlights

Educators, designers, technologists, and administrators working together to promote the **continuous improvement** of online courses through **collaborative development** of high-quality content and instruction.



Network Members, Pilots, & Partners



| | | | | | |
|--------------------------------------|----|---------------------------------------|----|-----------------------------------------|----|
| Academy School District 20 Online | CO | Iowa Learning Online | IA | | |
| Adams 12 Five Star Schools | CO | Kent Technology Academy | WA | | |
| Alabama Department of Education | AL | Kentucky Virtual Schools | KY | | |
| Albuquerque Public Schools | NM | Lake Tahoe Community College | CA | | |
| Anaheim Public Schools | CA | League for Innovation | AZ | San Jose Education Foundation | CA |
| AP Prep | NY | Los Angeles Unified School District | CA | San Luis Obispo Cty. Office of Educ. | CA |
| Aurora Public Schools | CO | Louisiana Department of Education | LA | San Marcos Baptist Academy | TX |
| Bambugare Network | NA | Lubbock Christian University | TX | Santa Barbara Cty. Office of Educ. | CA |
| Bethel Covenant College (Uganda) | | Lubbock Independent School District | TX | Saskatchewan Institute of | |
| Cal State Fullerton | CA | Maryland State Depart. of Education | MD | Applied Science and Tech | NA |
| Center to Bridge the Digital Divide | WA | Mason City School District | OH | Silicon Valley Workplace Center | CA |
| Chattanooga State | TN | Mead School District | WA | Silver State High School | NV |
| Chemeketa CC | OR | Michigan Virtual School | MI | South Carolina Depart of Education | SC |
| Clark County Virtual High School | NV | Mid-Hudson BOCES Consortium | NY | Southern Regional Education Board | GA |
| Colorado Community Colleges Online | CO | Minneapolis Public Schools Online | MN | Sowelo Technical Community College | LA |
| Colorado Online Learning | CO | Minnesota Online | MN | St. Petersburg College | FL |
| West Virginia Comm. Tech. College | WV | Mississippi Department of Education | MS | Teachers Without Borders | NA |
| Cooperstown Central School | NY | Missouri Virtual Instruction Program | MO | Tennessee Board of Regents | TN |
| CORE | | Missouri Virtual School | MO | Council of Chief State School Officers | KY |
| CUDI | | Montana State University - Billings | MT | The Mid-Hudson BOCES | NY |
| Cyberlearning | VA | Monterey Peninsula School District | CA | Tulare County Office of Education | CA |
| Digital Learning Commons | WA | myHimachal | PA | University of California College Prep | CA |
| Douglas County School District | CO | Myron B. Thompson Academy | HI | University of Montana System | MT |
| Eastside Preparatory School | NJ | Network for Mercy Education | IL | University of Texas at Brownsville | TX |
| EPC-Summer Academies | CA | New Mexico Cyber Academy | NM | UT TeleCampus | TX |
| Esperanza Academy | PA | New York Harbor School | NY | Utah Electronic High School | UT |
| Florida Distance Learning Consortium | FL | North Carolina Comm. College System | NC | Valley Christian School | CA |
| Florida Virtual School | FL | N. Dakota Ctr. for Distance Education | ND | Virtual College of Texas | TX |
| FSS Project T.E.C.H | CA | Northern Humboldt Con. of Schools | CA | Virtual School Society | NA |
| Georgia Board of Regents | GA | Northview High School | CA | Virtual Virginia | VA |
| Georgia Virtual School | GA | Omaha Public Schools | NE | West Virginia University at Parkersburg | WV |
| Greenville County Virtual School | SC | Open High School of Utah | UT | Western Governors University | UT |
| Grossmont Union High School District | CA | Oregon Department of Education | OR | Whitfield County Career Academy | GA |
| Gwinnett County Online Campus | GA | OTAN | CA | | |
| Hamilton County Virtual School | TN | Partnership for Innovations | NE | | |
| Hawaii Department of Education | HI | Petersons | | | |
| Hudson County Schools of Technology | NJ | Pierce College | WA | | |
| Idaho Digital Learning Academy | ID | Portland State University | OR | | |
| ilnstructor.net | UT | Poway Unified School District | CA | | |
| Illinois Virtual High School | IL | Rochester Public Schools | MN | | |
| Indian Prairie School District #204 | IL | RUSD | CA | | |
| Iowa Community College | IA | San Jacinto College | TX | | |



Custom Member Sites



HippoCampus Your Free One-Stop Educational Resource

Search [] Help About Login

Announcements: Welcome to HippoCampus ...

Community and Technical College System of West Virginia

Search [] Help About Login

Announcements: Welcome to Gary Lopez's HippoCampus page.

Los Angeles Unified School District Board of Education

Search [] Help About Login

Announcements: Welcome to the LAUSD HippoCampus page.

Maryland State Department of Education
Achievement Matters Most

Search [] Help About Login

Announcements: Welcome to Gary Lopez's HippoCampus page.

KENTUCKY VIRTUAL SCHOOLS

Search [] Help About Login

Announcements: Welcome to Gary Lopez's HippoCampus page.

Welcome

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There are two ways you can help keep HippoCampus free for everyone. First, if you don't find what you are looking for, let us know. We don't have every subject or book yet, but we are always adding new material. Second, tell all of your friends to check us out. The more people that use HippoCampus, the better we can make it.

Thanks for your help.
Don't show this again.

Subjects

- ▶ Algebra
- ▶ American Government
- ▶ Biology
- ▶ Calculus
- ▶ Environmental Science
- ▶ Physics
- ▶ Religion
- ▶ US History

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Link to HippoCampus from your website

CUDI HippoCampus



NATIONAL REPOSITORY
of ONLINE COURSES



Search

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Announcements Welcome to the CUDI HippoCampus page.

Subjects

- ▶ Algebra
- ▶ Algebra (Spanish)
- ▶ American Government
- ▶ Biology
- ▶ Calculus
- ▶ Calculus (Spanish)
- ▶ Environmental Science
- ▶ Physics
- ▶ Psychology
- ▶ Religion
- ▶ Statistics
- ▶ US History

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SHARE

Welcome to HippoCampus

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Find out more about HippoCampus [here](#).

Don't show this again.



**Students:
Get Tips
from the
Hippo**



Resources for

Educators

A community of educators, administrators, designers, and technologists working together to develop high-quality, online content and instruction

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NROC Network Case Studies

Offering Course Content Statewide



CHALLENGE:

Offer high-quality online course content statewide



“The (NROC courses) were a unique find. The quality is extraordinary, the flexibility is exceptional, and the feedback we’re getting from our teachers is the content is amazing.”

Steve Nelson

Chief Information Technology Strategist, ODOE

NROC Network Case Studies

Course Redesign & Blended Learning



CHALLENGE:

Replace some classroom time with online course components



“We chose the NROC content because it is high quality, and includes lessons, learning objects, activities and assessments, all of which may be used separately. The fact that lessons can be “chunked” in ways that work for the individual faculty member make them more desirable than other third party content.”

Michael Anderson, Assistant Director, UT System TeleCampus

NROC Network Case Studies

Replacing Costly Textbooks



CHALLENGE:

Textbook prices are too high.



On teaching US History without a textbook

“. . . we turned to NROC. I left my discussion questions, midterms, and finals the same as they were when we used the textbook, so I could compare outcomes. I was happy to find that my students are right on track with the digital alternative . . . “

Karen Kaemmerling
Chair of Social Sciences, CCCOnline

NROC Network Case Studies

ESL Students



CHALLENGE:

Learning English while keeping up with course work.

“I’ve noticed that they’re testing well on vocabulary words we reviewed in HippoCampus . . . The HippoCampus lessons really help reinforce their vocabulary with nice, clear audio, video, and animations.”

Rebekka Stone
Biology Teacher, HSHS



NROC Network Case Studies

Sharing Through a Central Repository



CHALLENGE:

Promote content sharing and save development costs among 35 member colleges.



"Starting a statewide digital repository is a challenge. At the core of the project, the repository must offer sufficient rich multimedia and high quality resources to attract and motivate faculty to use repository content. In Florida, we are licensing the high quality NROC content library to form that essential content core."

Susie Henderson, Director, Orange Grove