Connexions Demonstration

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< http://cnx.org/content/col10224/1.3/ >

C O N N E X I O N S

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Chapter 1

Authoring Tools[1]

NOTE: This module has been retired as it contained Connexions documentation which is no longer accurate and/or relevant. Please visit the help page[2] for up-to-date information about the Connexions website, including support for viewing and authoring content and the CNXML language. If you have any additional questions or cannot find the answer to your question, please contact techsupport@cnx.org[3] and we will be happy to assist in any way we can.

[1] This content is available online at <http://cnx.org/content/m10363/2.9/>.
[2] http://cnx.org/help
[3] techsupport@cnx.org

Chapter 2

Demo Overview[1]

WARNING: This module contains deprecated material.

This demo gives a brief, hands-on introduction to the Connexions system and its tools, including

- what modules (Chapter 3) are
- how we view (Chapter 4) modules
- how we construct courses (Chapter 5) from modules
- how we navigate (Chapter 6) through the modules
- how we compose (Chapter 1) modules
- ongoing content projects (Chapter 7)

[1] This content is available online at <http://cnx.org/content/m10366/2.9/>.

Chapter 3

Connexions Modules[1]

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[1] This content is available online at <http://cnx.org/content/m10360/2.20/>.
[2] http://cnx.org/help
[3] techsupport@cnx.org

Chapter 4

Browsers[1]

NOTE: This module has been retired as it contained Connexions documentation which is no longer accurate and/or relevant. Please visit the help page[2] for up-to-date information about the Connexions website, including support for viewing and authoring content and the CNXML language. If you have any additional questions or cannot find the answer to your question, please contact techsupport@cnx.org[3] and we will be happy to assist in any way we can.

[1] This content is available online at <http://cnx.org/content/m10364/2.11/>.
[2] http://cnx.org/help
[3] techsupport@cnx.org

Chapter 5

Courses in Connexions[1]

WARNING: The information in this module is outdated. Please see How to Use the Course Composer[2] for the latest information about Connexions courses.

Instructors weave modules into courses

- a course is a guided tour through the pool of modules[3]
- Course Composer[4] functionalities:
  - search[5] and preview appropriate modules
  - incorporate modules into a **course path**
  - re-order course path
  - group modules into "chapters"
  - add course-specific "implicit" links
  - export course path as an Resource Description Framework[6] (RDF) file (metadata standard)

Course path is multipurpose

- navigational tools[7] and Roadmap[8] display course path (look to the left to the "course view")
- modules in course path easily fused into a pdf file[9] for printing as a custom textbook (by student, instructor, university, or Kinkos[10] , for example)

Planned additions

- course-specific annotations
- segues
- side branches off course path

[1] This content is available online at <http://cnx.org/content/m10361/2.11/>.
[2] "How to Use the Collection Composer" <http://cnx.org/content/m10288/latest/>
[3] "Overview of Authoring Modules" <http://cnx.org/content/m10887/latest/>
[4] "How to Use the Collection Composer" <http://cnx.org/content/m10288/latest/>
[5] http://cnx.rice.edu/content/search
[6] http://www.w3.org/RDF
[7] "Viewing Connexions Content" <http://cnx.org/content/m11837/latest/>
[8] "Roadmap Tutorial" <http://cnx.org/content/m10338/latest/>
[9] http://cnx.rice.edu/courses/cnxtutorial/cnxtut.pdf
[10] http://kinkos.com

Chapter 6

Navigation in Connexions[1]

WARNING: The information in this module is outdated. Please see Viewing Connexions Content[2] and Roadmap Tutorial[3] for the latest information about navigating within Connexions.

When viewing a module, user needs to know

- where am I?
- where have I been?
- where could I go? (encourage **exploration**)

Connexions Roadmap

- allows students to easily and intuitively navigate course path
- helps students, instructors, and authors better visualize links between topics

Mozilla-based Roadmap

- module (Chapter 3) view (center)
- course (Chapter 5) view (left)
- cnx view (right) - not yet implemented - mockup[4] (best viewed with Internet Explorer)
- tool bar (top)

Roadmap features

- course view saves current location when leaving[5] course path
- all tools designed in conjunction with usability experts[6] from Rice Psychology Department

Web navigation a wide open area of research

- challenge: intuitive aids (graphical?)
- **open-source** and **open standards** will encourage development of a plurality of different Roadmaps

[1] This content is available online at <http://cnx.org/content/m10362/2.10/>.
[2] "Viewing Connexions Content" <http://cnx.org/content/m11837/latest/>
[3] "Roadmap Tutorial" <http://cnx.org/content/m10338/latest/>
[4] http://www.ruf.rice.edu/∼ztang/Prototypes/Roadmap4C/Prototype4.htm
[5] http://www.mellon.org
[6] http://www.ruf.rice.edu/∼lane

Chapter 7

Content Projects[1]

WARNING: This material is deprecated. A list of current Connexions' courses can be found here.[2]

Rice University courses (>500 modules)

- Elec 241 - Introduction to Information Engineering - **see course view at left**
- Elec 305 - Introduction to Physical Electronics - **see course view at left**
- Elec 301 - Signals and Systems
- Elec 302 - Dynamical Systems
- Elec 430 - Digital Communication Systems - **see course view at left**
- Caam 335 - Linear Algebra and Applications - **see course view at left**
- Mech 481 - Heat Transfer
- Rice Virtual Lab in Statistics
- Plan for entire Rice ECE core curriculum
- Plan for Rice Bioinformatics curriculum
- All Connexions documentation and tutorials - **see course view at left**

Digital Signal Processing (DSP) content project

- expansion outside Rice to a global community
- ripe opportunity for Connexions materials, as no adequate textbook exists
- elite DSP institutions and top faculty involved

  - University of Illinois, Douglas Jones[3] - **see course view at left**
  - University of Michigan, Al Hero[4]
  - Ohio State University, Lee Potter[5] , Phil Schniter[6]
  - Georgia Institute of Technology, Doug Williams[7]
  - Polytechnic University, Ivan Selesnick[8]
  - Ecole Normale Superieure de Lyon (France), Patrick Flandrin[9]
  - Ecole Normale Superieure de Telecommunications (France), Eric Moulines[10]

[1] This content is available online at <http://cnx.org/content/m10365/2.7/>.
[2] http://cnx.rice.edu/content/browse_courses
[3] http://www.ifp.uiuc.edu/∼jones
[4] http://www.eecs.umich.edu/∼hero/hero.html
[5] http://eewww.eng.ohio-state.edu/∼potter/
[6] http://eewww.eng.ohio-state.edu/∼schniter
[7] http://www.ece.gatech.edu/profiles/dbw/index.htm
[8] http://taco.poly.edu/selesi/
[9] http://www.ens-lyon.fr/∼flandrin
[10] http://www.ENST.FR/externe/tsi.html

  - INRIA (France), Jerome LeBrun[11]
  - Ecole Polytechnique Federale de Lausanne (Switzerland), Martin Vetterli[12]
  - Rice University, Richard Baraniuk, Don Johnson, Robert Nowak[13]

- Stage 1: open content development (started August 2001)
- Stage 2: construct courses for each school (starting end 2001)

[11] http://lcavwww.epfl.ch/∼lebrun/
[12] http://lcavwww.epfl.ch/∼vetterli/main.html
[13] http://dsp.rice.edu

Index of Keywords and Terms

Keywords are listed by the section with that keyword (page numbers are in parentheses). Keywords do not necessarily appear in the text of the page. They are merely associated with that section. *Ex.* apples, § 1.1 (1) **Terms** are referenced by the page they appear on. *Ex.* apples, 1

A author, § 1(1)

B browser, § 4(7)

C content, § 7(13)
course, § 5(9)
course path, § 5(9)
CourseComposer, § 5(9)

D demo, § 1(1), § 2(3), § 3(5), § 4(7), § 5(9), § 6(11), § 7(13)
DSP project, § 7(13)

M module, § 3(5)
Mozilla, § 4(7)

N navigation, § 6(11)

R RDF, § 5(9)
Roadmap, § 6(11)

X XML editor, § 1(1)

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Connexions Demonstration
This is an older demo course.

About Connexions
Since 1999, Connexions has been pioneering a global system where anyone can create course materials and make them fully accessible and easily reusable free of charge. We are a Web-based authoring, teaching and learning environment open to anyone interested in education, including students, teachers, professors and lifelong learners. We connect ideas and facilitate educational communities.

Connexions's modular, interactive courses are in use worldwide by universities, community colleges, K-12 schools, distance learners, and lifelong learners. Connexions materials are in many languages, including English, Spanish, Chinese, Japanese, Italian, Vietnamese, French, Portuguese, and Thai. Connexions is part of an exciting new information distribution system that allows for **Print on Demand Books**. Connexions has partnered with innovative on-demand publisher QOOP to accelerate the delivery of printed course materials and textbooks into classrooms worldwide at lower prices than traditional academic publishers.