course list

By:
sagar markal

course list

By:
sagar markal

Online:
< http://cnx.org/content/col11190/1.6/ >

C O N N E X I O N S

Rice University, Houston, Texas

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course list[1]

Course List

select course

- course 1 (Section 1.1.1)
- course 2
- course 3

[1] This content is available online at <http://cnx.org/content/m33981/1.2/>.

Chapter 1

course 1

1.1 Syllabus

1.1.1 Syllabus[1]

1.1.1.1 SYLLABUS

Content

1. Chapter 1 (Section 1.1.2)
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Chapter 1

Connexions Overview

1.1 Introduction to Connexions[1]

1.1.1 Overview

Connexions is a web-based document creation and management system for education and research materials. There are two parts to Connexions: a Content Commons that contains these materials and the software tools necessary to create, manage, and access these materials.

From its inception, Connexions was designed to allow the collaborative development and free availability of material. Instructors and authors can modify this material for any educational purpose. Connexions ofers FreejOpen Source software tools to help students, instructors, and authors manage these information assets forsharingandadvancingknowledgetobeneftthe globaleducationalcommunity. Allofthisisaccomplished through the use of the Creative Commons Attribution license[2] .

There are three general categories of Connexions users:

- Students -who use Connexions to access information on-line, to prepare for their classes.
- Authors -who enter content into Connexions in document fles called modules.
- Instructors -who build courses, which are documents created by linking related modules together in a specifc order.

Before you begin using the Connexions system, you should verify that you have all of the necessary software. Visit the Connexions Quick Start Guide[3] for a listing of the software that you will need and the links to help you download it.

[1] This content is available online at <http://cnx.org/content/m33977/1.6/>.
[2] This content is available online at <http://cnx.org/content/m33978/1.1/>.

1.1.2 The Connexions Home Page

The Connexions home page (Figure 1.1) is the starting point for your use of Connexions. It contains the following items:

- Home, Content, Lenses, About Us, Help, and MyCNX tabs (Section 1.1.2.1: Home, Content, Lenses, About Us, Help, and MyCNX Tabs)
- Breadcrumb Navigation Bar (Section 1.1.2.2: Breadcrumb Navigation Bar)
- Search Box and Quick Links (Section 1.1.2.3: Search and Quick Links)
- My Account and Login Sidebar (Section 1.1.2.4: My Account and Login Sidebar)
- Featured Content (Section 1.1.2.5: Featured Content)
- Find Content (Section 1.1.2.6: Find Content)

[1] This content is available online at <http://cnx.org/content/ml0884/2.26/>. [2] http://creativecommons.org/licenses/by/3.0/ [3] http://cnx.org/help

1

- Create Content (Section 1.1.2.7: Create Content)
- Spotlight Sidebar (Section 1.1.2.8: Spotlight Sidebar)
- Connexions News Sidebar
- Create a Connexions Account (Section 1.1.3: Account Requests)

These items also appear on the other Connexions web pages.

Figure 1.1: Connexions home page

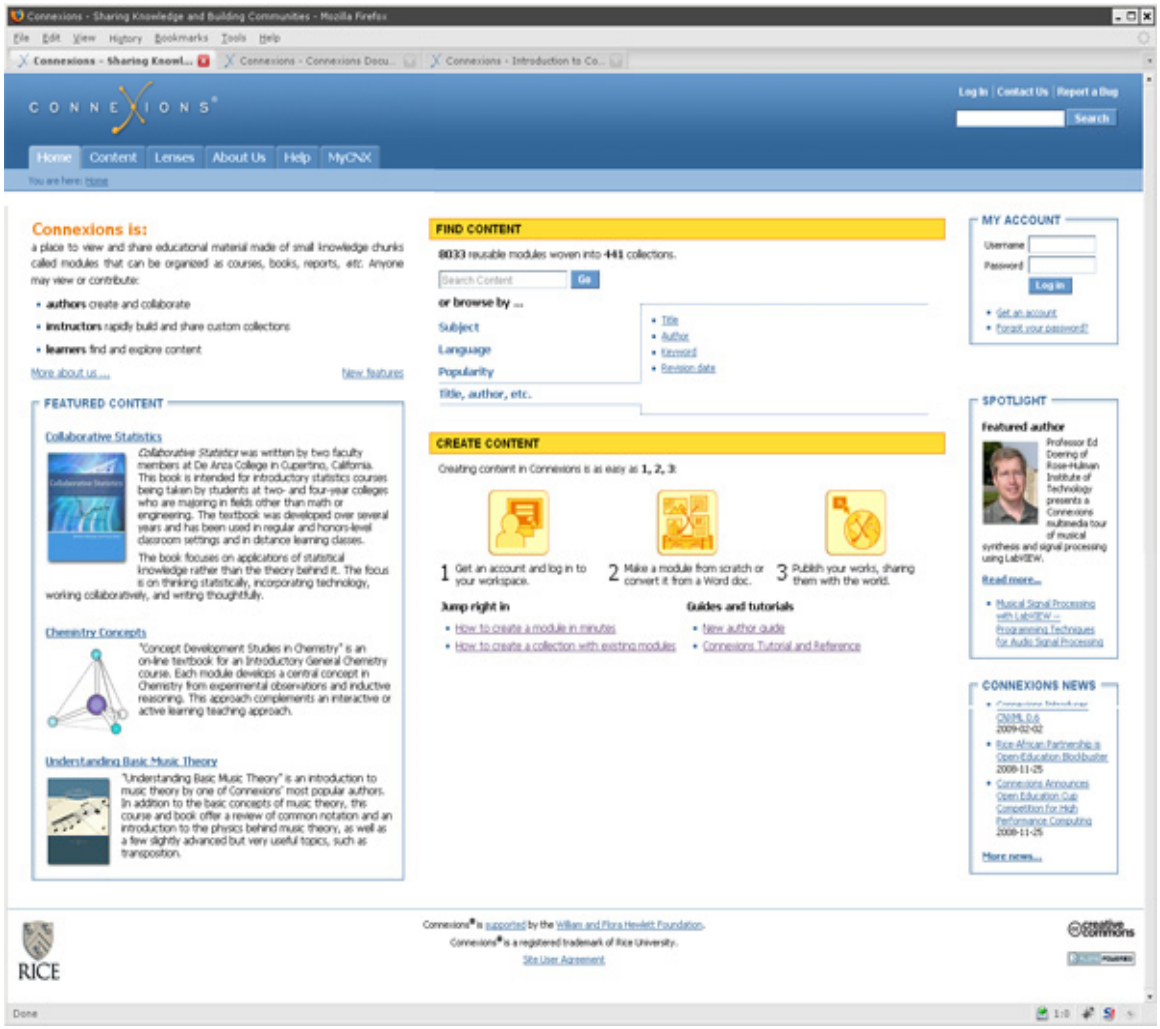


Figure 1.1

1.1.2.1 Home, Content, Lenses, About Us, Help, and MyCNX Tabs

On the upper left of the Connexions home page are tabs labeled "Home", "Content", "About Us", "Help", and "MyCNX". Clicking on these tabs display the following Connexions pages:

- Home[4] returns to the Connexions home page.
- Content[5] takes you to the Content landing page, where you can search for modules and collections of interest or browse the repository by subject, author, popularity and more.

[4] http://cnx.org/ [5] http://cnx.org/content/

- Lenses[6] is a portal to all user and organization-created lenses[7] .
- About[8] displays the "About" page that contains a general description of Connexions and links to more detailed information about Connexions, how it works, the people behind it, and a list of contacts.
- Help[9] displays the "Help" page that contains links to installation, reference, and other information to answer your questions about Connexions.

- MyCNX[10] displays your author homepage if you are signed in. This page includes links to your personal workspace, your workgroups, your lenses, and content you've recently visited.

1.1.2.2 Breadcrumb Navigation Bar

The "You are here" Breadcrumb navigation bar (Figure 1.2) is located just below the "Home", "About", "Content", "Software", and "Help" tabs. This navigation tool is a breadcrumb trail of the Connexions pages you have displayed as you have drilled into Connexions to get to the current page. By clicking on any point within the breadcrumb trail you can return to that page. This feature is very useful for returning to the workgroup level page after working with the items within the workgroup.

Figure 1.2

Figure 1.2: Breadcrumb navigation bar

1.1.2.3 Search and Quick Links

You can search the Content Commons for a specifc module or a course using the Search button and text box in the upper right of the Connexions home page. Type in a name, keyword, course title, module title, text string, or object ID in the Search text box and click Search. Connexions will display a list of all modules and courses that match your entry. To view a module or course, click on its title.

Above the search box are three quick links for your convenience. These links vary, depending on whether you are logged into the system or not.

Figure 1.3: Personal toolbar before login

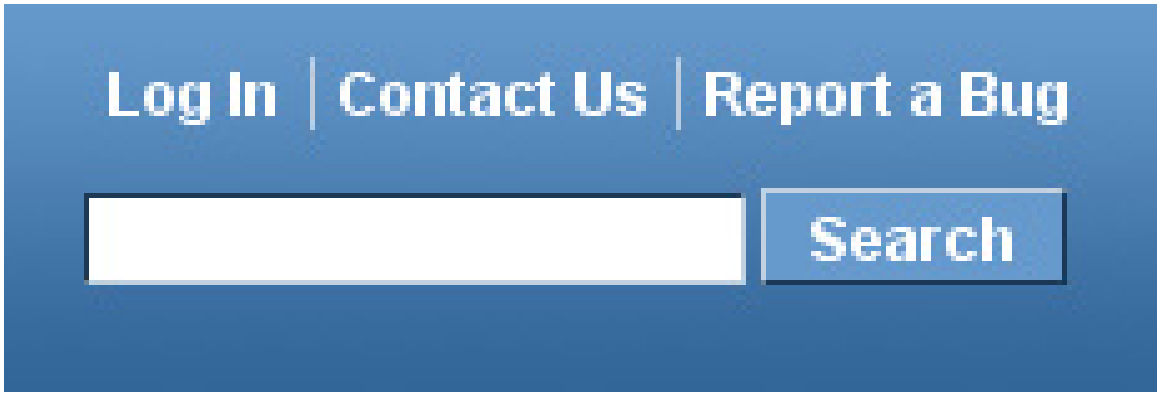


Figure 1.3

If you have a Connexions account and are logged into the system, you can perform the following actions by clicking on the links in this toolbar (Figure 1.4):

[6] http://cnx.org/lenses/ [7] http://cnx.org/help/lens what [8] http://cnx.org/aboutus/ [9] http://cnx.org/help/

[1O] http://cnx.org/author home

- Contact Connexions

- Report a bug
- Log out of the system

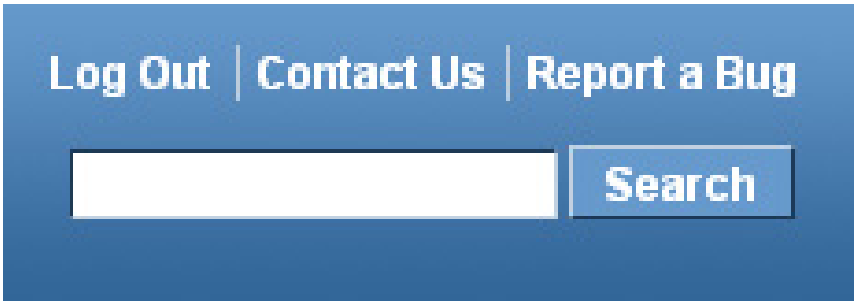


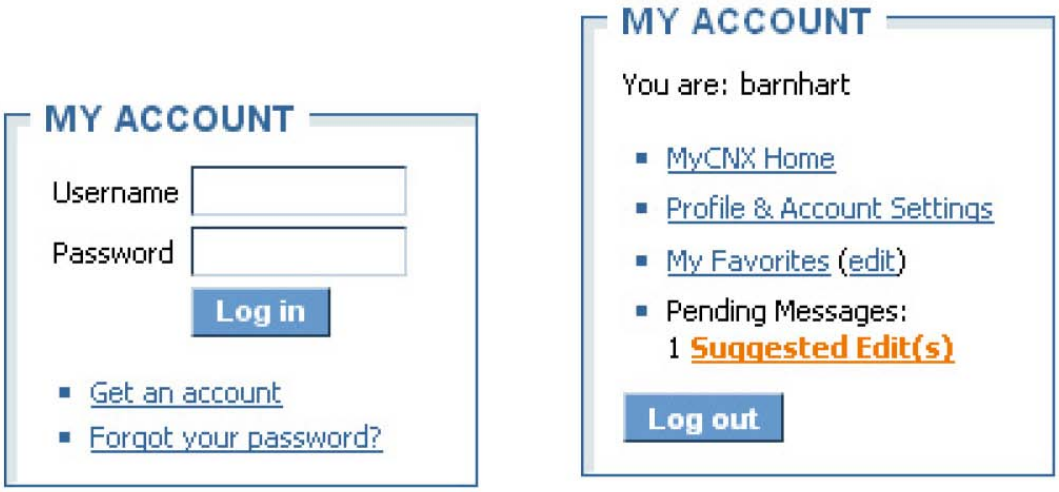
Figure 1.4

Figure 1..: Personal toolbar after login

1.1.2.4 My Account and Login Sidebar

On the right side of the Connexions homepage is the My Account sidebar. Its display depends on whether you are logged in or not.

Figure 1.5: My Accounts sidebar



(a)_ (b)_

Figure 1.5: My Accounts sidebar

Figure 1.5

(a) (b) The image on the left is displayed if you are not logged into Connexions or do not yet have an account. If you have a Connexions account, you can log into the system using this sidebar. In addition, there

is a link to reset your password (if you forgot it), and a link to the page for requesting a new Connexions account.

The image on the right is displayed if you are logged into Connexions. It features links to your MyCNX authoring page, a link to change your account settings, and a link to modules that you have marked as your favorites. If you have any pending role requests or suggested edits, these will also be displayed in the My Account box.

1.1.2.5 Featured Content

The Featured Content portal is located on the left side of the Home Page. It is used to showcase Connexions' most popular and outstanding content, ranging from math and science collections to academic lenses.

1.1.2.6 Find Content

You can start browsing Connexions' modules and collections from the Home Page by using the Find Content portal. The Search Content box is used to search for keywords related to the content you would like to fnd.

There are also several links in the Find Content portal that will point you toward interesting Connexions content. First, place your mouse over the way you wish to browse the repository [U+FFFD] either by Subject, Language, Popularity, or Title, etc. This will change the list of links on the right. Click on a link to being browsing that particular selection of Connexions content.

1.1.2.7 Create Content

It's easy to get started creating content on Connexions. The Create Content portal contains links to help you being authoring your own modules and collections.

1.1.2.8 Spotlight Sidebar

This sidebar features authors and their content, feedback from Connexions users, and events related to Connexions.

Figure 1.6: The Spotlight sidebar

Figure 1.6

1.1.2.9 News Sidebar

This sidebar contains links to news items[11] about the latest developments with Connexions. This includes updates to the site and outside publications that feature Connexions.

1.1.3 Account Requests

To apply for a Connexions account, use the following steps:

1. Click on the Get An Account link in the My Account sidebar. The Request a Connexions Account (Figure 1.7) page displays.

2. Type in your frst and last name, e-mail address, and home page URL. The felds with red squares next to the feld names are required.
3. Type in a user name.
4. Review the site license agreement and check the box next to I have read the Connexions Site License and I agree to be bound by its terms. You must agree to the license in order to receive an account.
5. Click Request Account. The "Account Request Complete" page displays. Connexions will send an

[11] http://cnx.org/news/

Figure 1.7: "Request a Connexions Account" page

Personal Details

First Name ■

Enter your first name, e.g. John

Last Name ■

Enter your last name, e.g. Doe.

E-mail ■

Example: jdoe@example.com. See above for our policy.

Home page

Enter the address of your personal Web page e.g. http://www.jdoe.com/~jdoe/

User Name ■

This is the name used to log in, usually something like 'jdoe'. Must not contain spaces or special characters. Usernames are case-sensitive.

☐ **I have read the Connexions Site License and I agree to be bound by its terms**

Request Account

Figure 1.7

e-mail to the address you entered in the step above. The e-mail contains directions for activating your new account.

1.1.4 Logging In and Out

To log into Connexions, enter your user name and password in the My Account sidebar and click Log in. To log out, click the Log out link located above the Search Box (Figure 1.4), in the upper right side of the

Connexions home page.

1.2 Reporting a Connexions Bug[12]

1.2.1 Submitting a Bug Report

In any software package you may encounter the occasional faw with a feature or the documentation. Please bring these faws, or bugs, to the attention of the Connexions team with the Report a Bug link, which is located on the Connexions Home page[13] and on other Connexions web pages in the Personal Toolbar.

To report a bug, use the following steps:

1. Click on the Report a Bug link. The Bug Report Submission Form[14] displays.
2. Enter a short summary of the problem.
3. Enter your name and e-mail address. These aren't required, but it helps us to know who's having trouble, and if you don't enter an email address we can't get back to you with an answer.
4. The page you were on immediately before the bug form is entered automatically into the "Problem URL" feld. If you didn't come directly from the error page, please go back to the page where you had the problem and enter its address here. If the problem was on a module or collection, the object ID number is sufcient, e.g. m99999. A content object's ID appears in its URL or on the page behind the "More About This Content" link.
5. Specify the nature of the error. Click the down arrow in the "Category" feld and select the appropriate entry from the drop-down menu.
6. Specify the impact of the error. Click the down arrow in the "Severity" feld and select the appropriate entry from the drop-down menu.
7. Enter a one-line summary of the bug in the "Task Title" feld.
8. Enter an explanation of the circumstances of the error in the "Description" feld. Include your actions and the system's actions that led up to the error condition. If possible, include step-by-step instructions for reproducing the bug.
9. Click Submit to enter the bug into the Connexions tracking system.

1.2.2 Helpful Tips for Submitting Bug Reports

Here are some tips for submitting error reports that will help us fx the bugs quickly.

• First, do not close the error message display until you have captured some information from it to include in your bug report. The error message contains important information. If you have left it to go to the Bug Report Submission Form[15] or to a Help[16] page, use the Back function on your browser to redisplay the error message.

[12] This content is available online at <http://cnx.org/content/mll836/l.7/>. [13] http://cnx.org/ [14] http://cnx.org/bug submit form [15] http://cnx.org/bug submit form [16] http://cnx.org/help/

- Include a copy of the error page. If the error displays an actual error message, please copy the text of that message and paste it into the bug report. It is even better to include the HTML source of the error message some of our systems include important information in HTML comments. While the error message is displaying, right click your mouse and select the View Source or View Page Source option, depending on your browser, to display the HTML for the page. Then you can copy the HTML information and paste it into the bug report.
- Full descriptions of errors are very useful. If your error involved a specifc module, include the name of the module. If you were in the editing interface, include the workgroup andjor module with which you were working. If you were using the Collection Composer, mention which course you were working with, and so forth. Include the exact URL of the page on which the error occurred. Always include a description of what you were doing, if you can.

1.3 Viewing Connexions Content[17]

See the Introduction to Connexions (Section 1.1) module for an overview of Connexions.

1.3.1 Searching the Content Commons

You can search the Content Commons for a specifc module or a course using the Search button and text box in the upper right of the Connexions web pages. Type in a name, keyword, course title, module title,

text string, or object ID in the Search text box and click Search. Connexions will display a list of all modules and collections that match your entry. To view a module or collection, click its title.

1.3.2 Opening a Collection

Select the "Content" tab (above the You are here Breadcrumb bar) to display the Content Commons (Figure 1.8) screen. This tab allows you to search for modules or collections by title, author name, or subject area. You can also display a listing of all content by subject, title, author name, keyword, popularity, and more by selecting the appropriate item under the "Browse All Content" heading on the tab.

a Collection or Course

When you frst open a course, the course title page displays. This page contains two panels. One panel displays the Start Course link and course information, such as the institution, instructor, contributing authors, and a brief description of the course. Click Start Course to display the entire course, beginning with the frst module. The other panel is labeled "Course Contents" and it contains a table of contents for the course that lists the names of the sections and modules within that course. You can click a module name to display that module.

[17] This content is available online at <http://cnx.org/content/mll837/l.l4/>.

Once you display a module from within a course, you can move to the previous module or to the next module in the course by clicking the «Previous or Next» links that appear in the upper right corner.

NOTE: The «Previous and Next» links only display when you access a module from within a course. If you access a module directly from a browser, these links to do not appear.

1.3.4 Viewing Related Material

You can view content related to the module you are displaying using the links in the "Related Material" panel that appears to the left of the module content. This panel includes:

- The names of other modules that contain content similar to the current module. Click a module name to display that module.
- Any other courses that contain the current module. Click a course name to display that course.

Figure 1.8

In the panel that appears to the right of the module content you can view links to examples, supplemental material, or prerequisite material provided by the module author. The importance of the links are shown by the number of bars in the box to the left of the link name. These links can be to material within Connexions or to a website outside of Connexions.

Figure 1.11: Links to pre-requisite materials, supplemental materials, and examples (not shown in this example)

Figure 1.9

1.3.5 Displaying Information about the Module

To display the metadata for the module, click the Metadata link at the end of the module. Metadata are non-content information about a module, such as the module ID, license type, version number, creation date, revision date, authors, maintainers, copyright holders, module name, keywords, and abstract.

1.3.6 Viewing Module Revision History

To view the revision history of a module, click the Version History link at the end of the module. When a new module is published Connexions assigns a revision number to that version of the module. If if becomes necessary to update the module, the author checks it out, edits it, and publishes it again. An incremented revision number is assigned to the updated version. Connexions stores all this revision information and you can view it on the History page for the module.

1.3.7 Printing a Module

To generate a PDF fle of a module, which you can print, click the Download PDF link that appears in the upper right corner of the module in the "Content Actions" panel. Sometimes you may want or need a printed copy of the material for studying purposes. You can generate a PDF fle for any module. These PDF fles are formatted for printing with page numbers, headers, footers, and numbered headings. Since the printing process uses a PDF fle, you must have a software package that can print PDF fles installed on your PC.

1.1.3 chapter 2[3]

1.1.3.1 cnx stucrure

Introduction to CNXML tags Understanding XML terminology Complete CNXML tag list Tags in the Edit-In-Place drop-down menu

[3]This content is available online at <http://cnx.org/content/m33876/1.12/>.

- para
- section
- code (block)
- list
- equation
- note
- exercise
- example
- table

Block tags you must manually insert

- rule
- defination
- quote(block)
- figure
- preformat

Inline tags you must manually insert

1. media
2. quote (inline)
3. foreign
4. code (inline)
5. sub
6. sup
7. preformat (inline)
8. link
9. cite
10. term
11. title

When you select an element from the drop-down menu and click "Add Here," Edit-In-Place inserts a text box in which you can enter your information for that CNXML element. The opening and closing bracketed tags are written and inserted for you. To add elements to your module that are not in the drop-down menu you must manually write in the code. To do this, click "Switch to Editing Full Source" (for the full module) or open an editable element by clicking on it (for small changes to a single portion of the module). For many elements, such as emphasis, or note, this is not complicated. Just add the opening and closing tags around the text you want to modify, as shown in the following examples:

1.1.3.2 Using the para tag

Description
The para tag contains a paragraph of text. The text may contain other CNXML elements and markup.

Example 1.1
Attributes para id

1.1.3.3 Using the figure tag

Description
The figure tag is used to provide the structure for inserting a figure into a CNXML document. A figure may contain an image, multimedia object, or caption tag.

Example 1.2: image upload
HERE IS THE WAY TO UPLOAD ANY IMAGE
figure id="img2"/ titlesample silde 2 (509 x 700)/ /title media id="img22" alt="Slide" image mime-type="image/jpeg" src="image2.jpg"/ /media caption Ziegler-Nichols Method slide 2 /caption /figure

IMPORTANT: First you have to import the file that you want to upload in the FILE section and use the same filename in the code

sample silde 2 (509 x 700)

Ziegler–Nichols method

From Wikipedia, the free encyclopedia

The **Ziegler–Nichols tuning method** is a heuristic method of tuning a PID controller. It was developed by John G. Ziegler and Nathaniel B. Nichols. It is performed by setting the *I* and *D* gains to zero. The "P" gain is then increased (from zero) until it reaches the **critical gain** K_c, at which the output of the control loop begins to oscillate. K_c and the oscillation period T_c are used to set the P, I, and D gains depending on the type of controller used:

Ziegler–Nichols method			
Control Type	K_p	K_i	K_d
P	$0.5 \cdot K_c$	-	-
PI	$0.45 \cdot K_c$	$1.2K_p / T_c$	-
PID	$0.6 \cdot K_c$	$2K_p / T_c$	$K_p T_c / 8$

This type of tuning creates a "quarter wave decay". This is an acceptable result, but not optimal.

References

- Van, Doren, Vance J. (July 1, 2003). "Loop Tuning Fundamentals (http://www.controleng.com/article/CA307745.html)". *Control Engineering* (Red Business Information). http://www.controleng.com/article/CA307745.html. Retrieved on 24 June 2007.
- Co, Tomas; Michigan Technological University (February 13, 2004). "Ziegler-Nichols Closed Loop Tuning" (http://www.chem.mtu.edu/~tbco/cm416/zn.html). http://www.chem.mtu.edu/~tbco/cm416/zn.html. Retrieved on 2007-06-24.
- Shaw, John (January 9, 1996). "Ziegler-Nichols Closed Loop (http://users.aol.com/JohnShaw/znclosed.html). http://users.aol.com/JohnShaw/znclosed.html. Retrieved on 2008-09-03.

External links

- http://controls.engin.umich.edu/wiki/index.php/PIDTuningClassical#Ziegler-Nichols_Method

This article about an engineering topic is a stub. You can help Wikipedia by expanding it (http://en.wikipedia.org/w/index.php?stub&title=Ziegler%E2%80%93Nichols_method&action=edit).
Retrieved from "http://en.wikipedia.org/wiki/Ziegler%E2%80%93Nichols_method"
Categories: Control devices | Engineering stubs

- This page was last modified on 13 November 2008, at 12:08.
- All text is available under the terms of the GNU Free Documentation License. (See **Copyrights**

Available for free at Connexions <http://cnx.org/content/col11190/1.6>

Figure 1.10: Ziegler-Nichols Method slide 2

1.1.3.4 exercise tag

Description
The exercise tag is used to present a question or task to the reader, with an optional answer hidden from view until the reader wants to reveal it. The question or task is contained within a problem tag and the answer is contained within a solution tag, both of which are inside the exercise tag.
Example For exercise tag

> **Exercise 1.1.3.1** ***(Solution on p. 20.)***
> What is Connexions??

1.1.3.5 CODE tag

Description
The code tag is used to insert a line or block of computer code (for example a command) into a document.

```
    Enter the command ls /etc to
  get a listing of configuration files.
Results in this display:

Enter the command ls /etc to get a listing of configuration files.
```

1.1.3.6 Link tag

The link tag is used to insert links to external resources.

Attributes(what's this?) *url (conditional): A Web path being linked to. Verify that the location is stable and will not change. You cannot use the "url" attribute in combination with the "document", "target-id", "resource", or "version" attributes. *document (conditional):The id of the module or collection being linked to (default is the present module). *target-id (conditional):The id of an element in a module or collection, such as a section or an image (default is the root element of the target module or collection). Can refer to an element in the present module or, alternately, an element on a seperate module if the "document" attribute has been specified. You cannot use the "target-id" attribute in combination with the "resource" attribute. *resource (conditional)The name of a resource, such as a supplemental PDF or text document (default is nothing). The resource must be a part of the present module or, if the "document" attribute has been specified, must be part of the target module. *version (conditional):The version of the module or collection being linked to (default is the latest version of the module or collection). Can refer to the module you are on or, alternately, a seperate module or collection if the "document" attribute has been specified. * window (optional): Possible values: o replace - The code will navigate to the reference URL in the same current window (default). o new - The code will be navigate to the reference URL in a new window * strength (optional): Possible values: o 1 - Sets link strength to 1 (the weakest) o 2 - Sets link strength to 2 (medium strength) o 3 - Sets link strength to 3 (the strongest) * id (optional): A unique identifier, whose value must begin with a letter and contain only letters, numbers, hyphens, underscores, colons, and/or periods (no spaces).

> NOTE: Links must provide a target, so one of the following attributes must be defined: "url", "document", "target-id", "resource", or "version".

1.1.3.7 Table Tag

Solutions to Exercises in Chapter 1

Solution to Exercise 1.1.3.1 (p. 19)

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:

Chapter 2

course 2

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

C course list, § (1)

L Link With Chapter 1 at Syllabus Module, § 1.1.2(3)

S Syllabus page to link with various modules, § 1.1.1(3)

X XML structure, § 1.1.3(15)

Attributions

Collection: *course list*
Edited by: sagar markal
URL: http://cnx.org/content/col11190/1.6/
License: http://creativecommons.org/licenses/by/3.0/

Module: "course list"
By: sagar markal
URL: http://cnx.org/content/m33981/1.2/
Page: 1
Copyright: sagar markal
License: http://creativecommons.org/licenses/by/3.0/

Module: "Syllabus"
By: sagar markal
URL: http://cnx.org/content/m33977/1.6/
Page: 3
Copyright: sagar markal
License: http://creativecommons.org/licenses/by/3.0/

Module: "Chapter 1"
Used here as: "chapter 1 "
By: sagar markal
URL: http://cnx.org/content/m33978/1.1/
Pages: 3-15
Copyright: sagar markal
License: http://creativecommons.org/licenses/by/3.0/

Module: "chapter 2"
By: sagar markal
URL: http://cnx.org/content/m33876/1.12/
Pages: 15-19
Copyright: sagar markal
License: http://creativecommons.org/licenses/by/3.0/

course list

This collection is created for testing purpose.. In this collection i am trying to link the various modules. The tree structure is as follow..... course list 1.course 1 Syllabus -chapter 1 -chapter 2 . . 2.course 2 3.course 3 . . .

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.