



## Modules in Joomla!

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## TABLE OF CONTENTS

<b>Welcome to Modules in Joomla!.....</b>	<b>3</b>
Getting Started.....	3
What is Joomla? .....	3
Additional Training / Documentation.....	3
<b>What is a Module? .....</b>	<b>3</b>
<b>Module Positions.....</b>	<b>4</b>
<b>Custom Modules .....</b>	<b>5</b>
Accessing the Joomla! Back-End.....	5
Create a New Module .....	5
<b>Editing a Custom Module.....</b>	<b>7</b>
<b>Displaying a Category List.....</b>	<b>8</b>
<b>Random Image Module .....</b>	<b>10</b>
Create Random Image Module.....	10
<b>Placing a Module within Content.....</b>	<b>11</b>
<b>Adding Menu Modules to your site .....</b>	<b>13</b>
Procedure:.....	13
<b>Adding the RU Courses Module to your Website .....</b>	<b>14</b>
Sample Page:.....	14
Creating a new RU Courses Module .....	15
Adding Module to Article for Display .....	16
Adding syllabus to RU Courses Module .....	17
1) Rename the syllabus files.....	17
2) Upload the files.....	17
Sample Result:.....	18
<b>Logout from Joomla!.....</b>	<b>18</b>
<b>Future Workshops .....</b>	<b>18</b>

## **WELCOME TO MODULES IN JOOMLA!**

### ***GETTING STARTED***

1. If you are working from home or another off-campus location, log on to the Rutgers VPN from your computer; you can find instructions here:

<https://sasit.rutgers.edu/how-to-guides/working-remotely/vpn-instructions>

2. Open a web browser on your computer (Firefox, Chrome, or Safari)
3. Go to the website: <https://www.sas.rutgers.edu/cms/training>

### ***WHAT IS JOOMLA?***

Joomla! is Content Management System (CMS) software that allows you to update your web site through a browser (such as Google Chrome, Mozilla Firefox, or Safari). Joomla! simplifies the process of updating a website by eliminating the need to edit HTML or use web design software.

Visit <https://www.joomla.org/> for more information on Joomla.

### ***ADDITIONAL TRAINING / DOCUMENTATION***

Visit our website: <https://sasit.rutgers.edu/how-to-guides/web-development-documentation>

### ***WHAT IS A MODULE?***

A Module in Joomla! is a “mini program” or custom block of content that can be displayed in various positions on the website. Modules can make your site more dynamic and easier to work with if used properly. A module has two very important properties:

**Position:** This determines **where** the module will be displayed on the web page.

**Menu Assignment:** This determines **what** page(s) will display the module.

## MODULE POSITIONS

Each template that is used in Joomla! has different module positions. For our SAS-RED template commonly used positions are shown below:

The screenshot shows the Rutgers School of Arts and Sciences homepage. At the top, there is a red header bar with the Rutgers logo and the text "This Is a Very Long Optional Secondary Name" and "This Is a Very Long Primary Site Name". Below the header is a large banner image of a person jumping in front of a "Revolutionary" sign. To the left of the banner is a "Welcome Message" module containing a small image of a building entrance and some text. To the right of the banner is an "Upcoming Events (sidebar-b)" module listing several events with small descriptions. Below the banner are four modules labeled "Mainbottom-A", "Mainbottom-B", "Mainbottom-C", and "Mainbottom-D", each with a dark gray background and white text indicating a minimum recommended size of 460 x 460. At the bottom of the page are four more modules labeled "extension-a", "extension-b", "extension-c", and "extension-d", also with a minimum recommended size of 460 x 460.

In this example, the position names have been included in the module titles.

**Sidebar-b:** module appears to right of content area

**Mainbottom-a, b, c, d:** modules appear in top row under the content area

**extension-a, b, c, d:** modules appear in top row under the content area

## CUSTOM MODULES

A custom module allows you to add custom text and/or an image and place it into a position on the website.

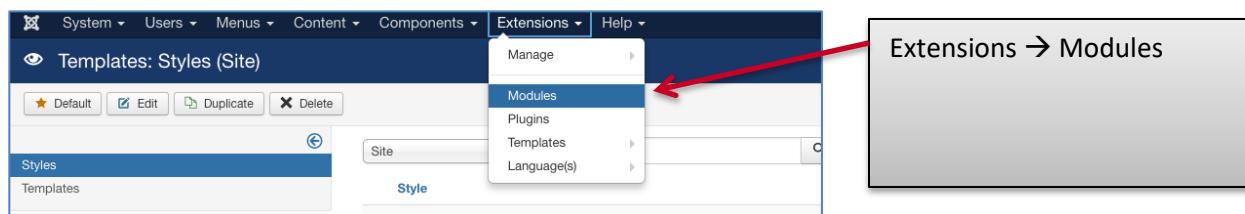
### ACCESSING THE JOOMLA! BACK-END

Open a new browser window: Ctrl+N (Windows) or Command+N (Mac). Then, enter the URL:

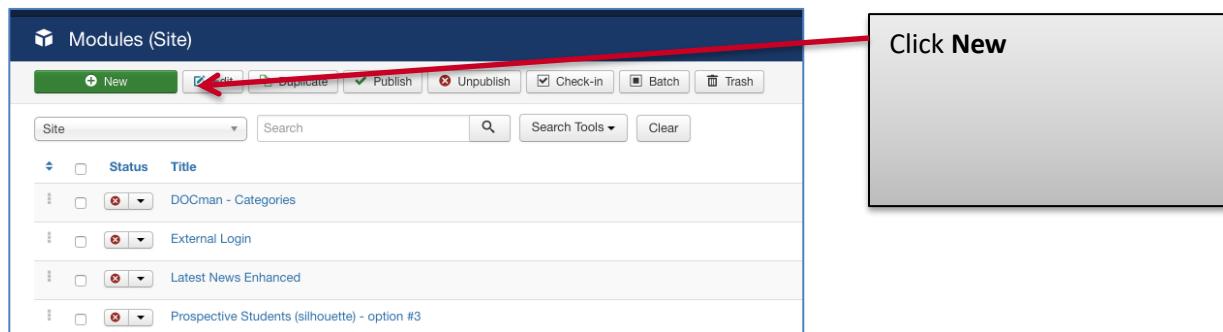
<https://www.sas.rutgers.edu/cms/training/administrator/>

### CREATE A NEW MODULE

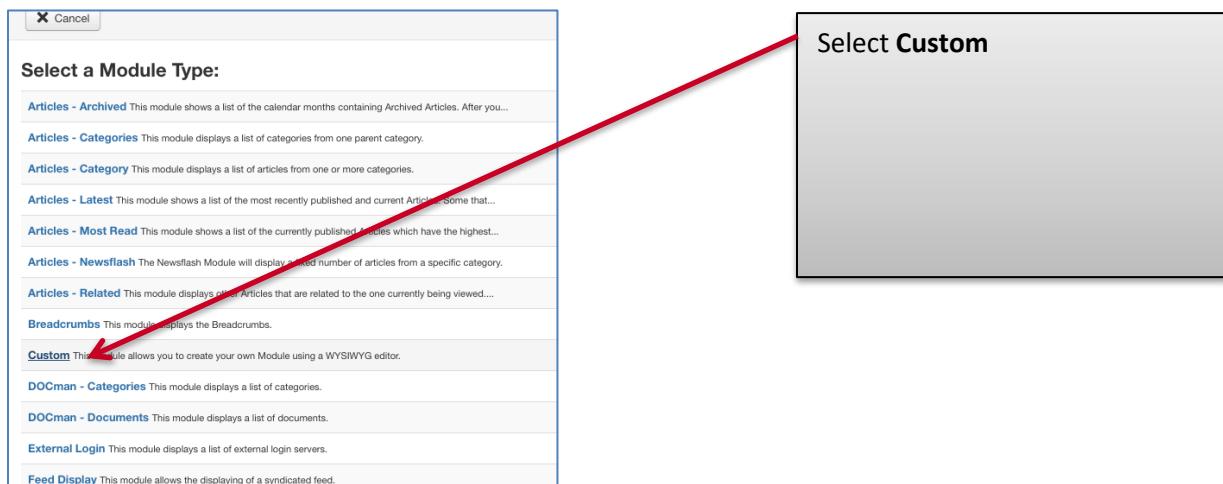
1. Go to: **Extensions → Modules**



2. Click the **New** Button to create a new module:



3. For "Select a Module Type," select **Custom**:



#### 4. Configure the Custom Module:

This screenshot shows the configuration interface for a custom Joomla module. The title is set to "This is a custom module title". The position is set to "Sidebar B [sidebar-b]". The status is "Published". The content area contains a WYSIWYG editor with an image of a mural.

- 1. Module Title:** For this workshop, enter “Custom” followed by your first name and last initial
- 2. Show Title:** To display the module title, select ‘Show’
- 3. Module Position** (where it will display on the page): select “Sidebar-b”
- 4. Content can include text, image or anything that you like**

#### 5. Click “Menu Assignment” to determine what pages the module will appear on:

This screenshot shows the "Menu Assignment" tab of the module configuration. The dropdown menu assignment is set to "Only on the pages selected". The main menu selection dropdown is open, showing various menu items like CUSTOM MENU, FOOTER MENU, HIDDEN, INFORMATION FOR, and MAIN MENU. Under MAIN MENU, the "Home" item is checked.

- 1. Module Assignment:** Change to “Only on the pages selected”
- 2. Click on **None** after “Select, All” to ‘de-select’ all items, before selecting the items to click.**
- 3. Check the box next to the menu item(s) or pages you want the module to be displayed on.** For this workshop, select the menu item with your name.

#### 6. Click Save & Close

## EDITING A CUSTOM MODULE

If a module already exists on your website, and you need to edit it, first figure out what type of module it is. If it just has text or an image in it, it is probably a custom module.

1. Go to back end, **Extensions → Modules**
2. In the search field, type your name and press [Enter]

The screenshot shows the Joomla Module Manager interface. At the top, there are buttons for New, Edit, Duplicate, Publish, Unpublish, Check-in, Batch, and Trash. Below that is a search bar with the text 'contact'. A red arrow points to the search bar. To the right of the search bar are 'Search Tools' and 'Clear' buttons. On the far right is a 'Position asc' button. The main table lists three modules:

Site	Status	Title	Position	Type	Pages	Access
Site	Enabled	Contact Us	bottom-e	Custom	All	Public
Site	Enabled	Contact Us - Google Map	extension-a	Custom	Selected	Public
Site	Enabled	Contacts	extension-b	Custom	Selected	Public

A red arrow points to the 'Contact Us' module in the list. To the right of the table is a callout box with the following text:

Type your name in the search.  
Hit <ENTER>  
Click the name of your module.

3. Click the title of your module.
4. Edit the module as needed (similar to editing an article)

The screenshot shows the Joomla Custom Module editor. At the top, there are tabs for Module, Menu Assignment, Module Permissions, Options, and Advanced. The Module tab is selected. Below that is a 'Site' dropdown. The main area is titled 'Custom' and contains the text: 'This module allows you to create your own Module using a WYSIWYG editor.' There is a 'show/hide' button with a gear icon. To the right are 'Editor' and 'Code' buttons. Below the text is a WYSIWYG editor toolbar with various icons for text, images, and tables. The editor content area contains three paragraphs of text:

**Departmental Chair**  
Firstname Lastname

**Undergraduate Director**  
Firstname Lastname

**Undergraduate Advisor (Optional)**  
Firstname Lastname

5. When done, click **Save & Close**.

## DISPLAYING A CATEGORY LIST

If there are multiple articles in the same category, you can display a list of those articles in a module position by creating an Articles - Category module.

For example, this site has different articles for each semester's course offerings:

The screenshot shows a Joomla module titled "Graduate Course Offerings" for the "Spring 2017" semester. The table lists various graduate courses with their details. A red arrow points from the "Graduate Course Offerings" heading in the sidebar to the "Graduate Course Offerings" heading in the main content area. Another red arrow points from the "Graduate Menu" sidebar to the "Graduate Course Offerings" sidebar.

COURSE	CR	COURSE TITLE	CROSS LISTING
+ 16:730:570	3	Sem Phil of Language	16:185:600
+ 16:730:580	3	Seminar in Ethics	
+ 16:730:602	3	Spec Studies Philos	
+ 16:730:605	3	Spec Studies Philos	
+ 16:730:653	3	Adv Tpc: Metaphysics	
+ 16:730:658	3	Adv Tpc: Phil Physic	
+ 16:730:670	3	Adv Tpc: Phi of Lang	
+ 16:730:675	3	Adv Tpc: Phi of Mind	16:185:601
+ 16:730:680	3	Adv Topics: Ethics	
+ 16:730:695	3	Dissertation Seminar	
+ 16:730:702		Res in Philosophy	
+ 16:730:800	0	Matriculation Contd	
+ 16:730:811	0	Graduate Fellowship	
+ 16:730:866	6	Full Ga Appointment	
+ 16:730:887	3	Part Ga Appointment	
+ 16:730:877	6	Full Ta Appointment	
+ 16:730:878	3	Part Ta Appointment	

Showing 1 to 17 of 17 entries

Previous 1 Next

Graduate Menu

- Graduate Admissions
- PhD Requirements
- Graduate Learning Goals & Assessment
- Placement
- Philosophy Course Catalog
- Climate
- Legal Philosophy MA
- Graduate Course Offerings
- Prospective Graduate Students
- Resources for Graduate Students

Graduate Course Offerings

- Current Offerings
  - Spring 2017
  - Fall 2016
- Past Offerings
  - Spring 2016
  - Fall 2015
  - Spring 2015
  - Fall 2014
  - Spring 2014
  - Spring 2013

1. “Graduate Course Offerings” is a Module
2. The articles are arranged and grouped by subcategories
3. The Articles are sorted by article order

### 1. Create a new module, with the type: “Articles – Category”:

The screenshot shows the "Select a Module Type:" page. A red arrow points from the "Articles - Category" option to the "Articles - Category" option in the list below. The "Articles - Category" option is described as "This module displays a list of articles from one or more categories."

- AcyMailing Module [Subscribe / Unsubscribe](#) Module for AcyMailing
- Articles - Archived** This module shows a list of the calendar months containing Archived Articles. After you...
- Articles - Categories** This module displays a list of categories from one parent category.
- Articles - Category** [This module displays a list of articles from one or more categories.](#)
- Articles - Latest** This module shows a list of the most recently published and current Articles. Some that...
- Articles - Most Read** This module shows a list of the currently published Articles which have the highest...
- Articles - Newsflash** The Newsflash Module will display a fixed number of articles from a specific category.
- Articles - Related** This module displays other Articles that are related to the one currently being viewed....

### 2. Enter your name followed by “Articles - Category” for “Title.” For “Position,” select “sidebar-b,” and for “Menu Assignment,” make the same selections as you did with your custom module.

- Click **Filtering Options** to determine how many articles to display, and from which categories:

The screenshot shows the 'Filtering Options' tab of a configuration interface. It includes fields for 'Count' (set to 0), 'Category' (set to 'All Categories'), and 'Author' (set to 'Select Authors'). There are also sections for 'Child Category Articles', 'Category Depth', 'Author Filtering Type', and 'Author Alias Filtering Type'.

- Count:** Select # of articles to display
- Category:** Select one or more categories to display

- Select **Ordering Options** and select which article field to sort the articles by, and whether the articles should be in ascending or descending order.

Example: select "Random" to display the articles in a different order each time the page is visited.

- Select **Grouping Options** to determine whether the articles should be grouped by any particular property:

The screenshot shows the 'Grouping Options' tab of a configuration interface. It includes fields for 'Article Grouping' (set to 'Category') and 'Grouping Direction' (set to 'Ascending'). There is also a 'Month and Year Display Format' field (set to 'FY').

- Select type of grouping (for example, by category)
- Select "Ascending" or "Descending" for **Grouping Direction**

- When done, click **Save & Close**.

## RANDOM IMAGE MODULE

This module will display a single image from a folder. If you have 10 images in the folder, each time the page is visited a different image will be displayed.

This module works best if all images in the folder are the same size.

It is possible to assign a link to the module, so that if someone clicks on the image they will be taken to a specific area of the website. Note that the link will be the same for all images.

### Create Random Image Module

1. Create new module of type “Random Image”

The screenshot shows a list of available modules. The 'Random Image' option is highlighted with a red arrow pointing to it. Other options listed include Latest Users, Login, Menu, Random Image, RokNavMenu, Rutgers Course List, Rutgers Electives Search, and Rutgers Events.

- Latest Users This module displays the latest registered users.
- Login This module displays a username and password login form. It also displays a link to...
- Menu This module displays a menu on the Frontend.
- Random Image** This module displays a random image from your chosen folder.
- RokNavMenu RocketTheme Customizable Navigation Menu
- Rutgers Course List This module retrieves courses from the RU course list for the selected semester and...
- Rutgers Electives Search This module finds courses that fit into a schedule from across SAS. Promotes smaller...
- Rutgers Events This module displays events from the Rutgers calendar of events in a sortable table view

2. Enter your name followed by “Random Image” for “Title.” For “Position,” select “sidebar-b,” and for “Menu Assignment,” make the same selections as you did with your custom module.
3. Configure the module options:

The screenshot shows the configuration screen for the Random Image module. It includes tabs for Module, Menu Assignment, Module Permissions, and Advanced. The Advanced tab is active. The configuration fields are as follows:

Image Type	jpg
Image Folder	images/photos
Link	<input type="text"/>
Width (px)	<input type="text"/>
Height (px)	<input type="text"/>

Three red arrows point from the right side of the image to the 'Image Folder', 'Link', and 'Width (px)' fields. To the right of the configuration screen is a box containing instructions:

1. Specify Image folder that the images are in (for this workshop, enter “images/Admin-2021”)
2. Specify a single link (optional)
3. Enter the width and height of the images (for this workshop, enter 460 x 460)

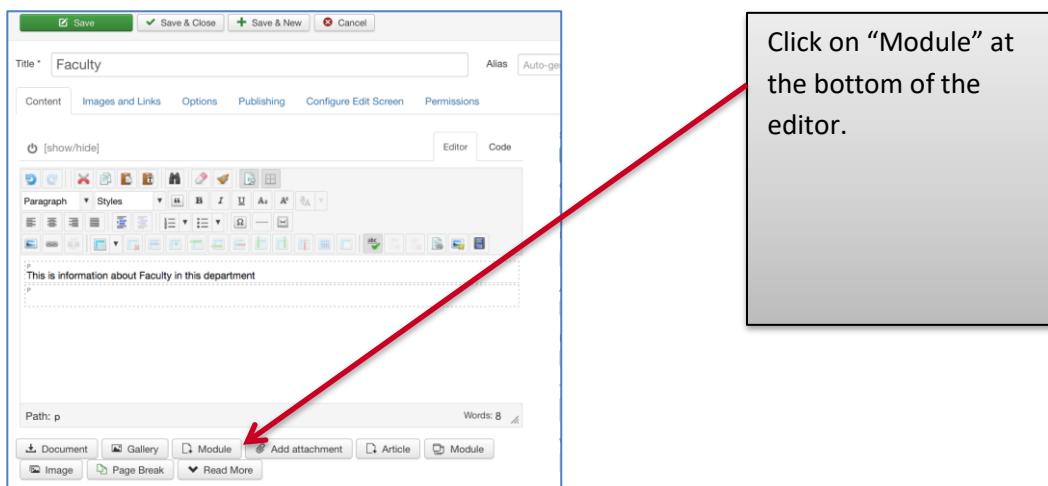
4. When done, click **Save & Close**.

## PLACING A MODULE WITHIN CONTENT

Normally, a module is displayed in a specific module position. However, it is also possible to embed (or "nest") a module inside of an article.

### 1. Edit your article:

- Go to: **Content > Articles**
- Click **Search Tools**
- Change "Select Category" to "Modules Workshop"
- Click on the title of your article to edit it.
- Click within the text area below the editing toolbars.
- Click the "Module" button below the text area:



2. On the "Insert Module" page, search for your name (see #1 below). Then, click the number for the module you would like to display inside your article (see #2 below):

A screenshot of the 'Insert Module' search results table. The search bar at the top contains the text 'eddie' with a magnifying glass icon and an 'X' button. To the right is a dropdown menu for 'Select Status'. The table has columns for 'ID', 'Status', and 'Title'. There are four rows of results:

ID	Status	Title
1684	✓	Custom Eddie K
1685	✓	Eddie Articles
1686	✓	Eddie Random Image
<b>2 1687</b>	✓	Eddie Random Image

3. You will now see code inside the article corresponding to the ID number of your module:

The screenshot shows the Joomla editor interface. At the top, there is a title input field containing "Eddie K". Below the title, a navigation bar includes tabs for Content, Options, Sample Fields, Publishing, Configure Edit Screen, and Permissions. A "show/hide" button is also present. The main area features a WYSIWYG toolbar with various icons for text, style, alignment, and media. A green rectangular box highlights a code block in the editor's content area, which contains the following text:

```
P  
{module id="1687"}
```

4. Click **Save & Close**. The module will now be displayed within your article.

## ADDING MENU MODULES TO YOUR SITE

You can improve the navigation of your website by displaying right side menu modules.

The screenshot shows the Rutgers School of Arts and Sciences website. The main menu has a 'PEOPLE' dropdown. A secondary 'People' menu is displayed on the right side of the page under the 'Sidebar B [sidebar-b]' position. This secondary menu is identical to the 'People' item in the main 'PEOPLE' dropdown. Red arrows point from the main 'People' menu item to the secondary menu, and another red arrow points from the secondary menu back to the main 'People' menu item.

### Example:

The “People” menu on the right is identical to the dropdown menu under “People” on the Main menu.

This allows users to access those menu items without hovering over the main menu.

### PROCEDURE:

1. Go to “Extensions > Modules” and create a new module
2. For “Select a Module Type,” select **Menu**
3. Configure Module Options:

The screenshot shows the Joomla Module Manager for a 'People' menu module. The configuration options include:

- Title: People
- Select Menu: Main Menu
- Start Level: 2
- Position: Sidebar B [sidebar-b]

Red arrows point from the 'Title' field, 'Select Menu' dropdown, 'Start Level' dropdown, and 'Position' dropdown to the corresponding numbered steps in the procedure on the right.

1. **Title** = Your name followed by “Menu”
2. **Select Menu** = Main Menu
3. **Start Level** = 2 (this tells Joomla! to start at the second level of menu items)
4. **Position** = sidebar-b

4. Click “Menu Assignment” to determine what pages the module will appear on.
5. Module Assignment: Change to “Only on the pages selected”
6. Click on **None** after “Select, All” to ‘de-select’ all items
7. Check the box next to the menu item with your name.
8. Click **Save & Close**.

## ADDING THE RU COURSES MODULE TO YOUR WEBSITE

**RU Courses** is a module that will display the current schedule of classes for a specific subject. The newest version includes all semesters that are available for view.

### SAMPLE PAGE:

<https://www.sas.rutgers.edu/cms/deptdemo/academics/undergraduate-program/course-schedules>

Spring 2021 Schedule

Select a different year and/or semester:

Year:  Semester:

Show and hide details about course sections:

Show ALL sections (detail rows).  
 Hide ALL sections.

Search:

	Yr	Term	Course	Cr	Title	Cross Listing
±	2021	Spring	01:220:102	3.00	Intro to Microeconom	
±	2021	Spring	01:220:103	3.00	Introduction to Macroeconomics	
±	2021	Spring	01:220:110	3.00	Personal Finance and Financial Decision Making	
±	2021	Spring	01:220:212	3.00	Econ Data Anlytcs: Intro to Data Mgmt, Statstcs & Rgressn Mthds for Decision Making	
±	2021	Spring	01:220:300	3.00	International Economics	
±	2021	Spring	01:220:301	3.00	Money, Banking and the Financial System	
±	2021	Spring	01:220:305	3.00	Amer Economic Hist	
±	2021	Spring	01:220:307	3.00	Economics of Globalization: A Historical Perspective	
±	2021	Spring	01:220:320	3.00	Intermediate Microeconomic Analysis	
±	2021	Spring	01:220:321	3.00	Intermediate Macroeconomic Analysis	
±	2021	Spring	01:220:322	3.00	Econometrics	

## CREATING A NEW RU COURSES MODULE

1. Go to “Extensions > Modules” and create a new module
2. For “Select a Module Type,” select **Rutgers Course List**
3. Module configuration:
  - a. **Title** – Your name, followed by “Courses” (see #1 below)
  - b. **Subject** – Select your department’s subject (or one that interests you) (see #2 below)
  - c. **Course Level**: Select “Undergraduate” or “Graduate” (see #3 below)
  - d. Do not select a position (we will embed the modules into our articles)
  - e. **Menu Assignment** (see #4 below) – select and change “Module Assignment” to “No Pages”

The screenshot shows the configuration interface for a 'Rutgers Course List' module. At the top, there are four buttons: 'Save' (green), 'Save & Close' (light green), 'Save & New' (light blue), and 'Cancel' (grey). Below these buttons, the 'Title' field is set to 'Eddie Courses 1'. A red box surrounds this field. Underneath the title, there are four tabs: 'Module' (disabled), 'Menu Assignment' (selected, highlighted with a blue box and labeled '4'), 'Advanced', and 'Permissions'. The 'Advanced' tab is currently active. The main content area is titled 'Rutgers Course List' and has a 'Site' tab selected. It contains the following settings:

- 'Database INI Path': An empty input field.
- 'Subject': A dropdown menu showing '700: Music' (labeled '2').
- 'Course Level': A section with two radio buttons. 'Undergraduate' is empty, while 'Graduate' is selected (labeled '3').
- 'Schools': An input field containing '01,16'.

## ADDING MODULE TO ARTICLE FOR DISPLAY

We can embed the RU Courses module within our articles using similar steps to those we followed for “PLACING A MODULE WITHIN CONTENT” earlier:

- Go to: **Content > Articles**
- Find your article and click on its title to edit it.
- Click somewhere within the text area of your article.
- Click the “Module” button below the text area.
- On the “Insert Module” page, search for your name.
- This time, click the ID number (*see #1 below*) for the module with type “mod\_ru\_courses” (*see #2 below*)

ID	Status	Title	Position	Type
1 1690	✓	Eddie Courses	None	mod_ru_courses 2
1689	✓	Eddie Menu	sidebar-b	mod_menu
1687	✓	Eddie Random Image	sidebar-b	mod_random_image
1685	✓	Eddie Articles	sidebar-b	mod_articles_category

- Your article will contain code similar to the below in the place where the module will be shown:

```
{module id="1690"}
```
- When done, click **Save & Close**.

## *ADDING SYLLABUS TO RU COURSES MODULE*

The RU Courses module will find and display syllabi files that follow the proper naming convention. The files should be saved as PDF files and uploaded to the "syllabi" folder using **JCE Editor Pro – File Browser**.

If you decide to go this direction, please only keep syllabi for the current semester in the syllabi folder. Once the semester is over, please delete the syllabi. If you keep many semesters' worth of syllabi in this folder, it will slow down the system significantly.

### **1) Rename the syllabus files.**

Use the following naming convention:

YYYYsemester-school-subject-course.file\_extension

or

YYYYsemester-school-subject-course-section.file\_extension

- YYYY: the four digit year.
- semester: To indicate "semester", use corresponding number below:
- Spring: 1
- Summer: 7
- Fall: 9
- Winter: 0
- school-subject-course: standard course number

section: [optional] If the section is not supplied, the syllabus will be treated as a default syllabus for the course and be loaded for any sections which do not have one uploaded.

file\_extension: The extension can be pdf, doc, docx, txt. PDF is preferred as it will retain text and layout formatting.

Example:

A syllabus for 01:377:140 (Foundations of Exercise Science and Sport Studies) Section 06, Fall 2021,PDF format should have the following name:

20219-01-377-140-06.pdf

### **2) Upload the files.**

Be sure to upload the documents to the "syllabi" folder in the root level of "images". If uploaded elsewhere, "RU Courses" will not be able to find them.

To create, or check for a "syllabi" folder, go to **Components --> JCE Editor** and click the "File Browser" icon that shows in the center of the page. If no syllabi folder exists at the root level (under "Home"), click the "New Folder" icon and create one named "syllabi".

- Navigate so that you are in the "syllabi" folder. When you are, its name will appear highlighted (left column).
- Click the cloud icon to upload files. **More than one file may be uploaded at a time.**
- If a file was not named properly, it can be renamed here. To do that, click the file then look for the edit icon in the right side of window.

### Sample Result:

Once you have saved your syllabi file or files, they will appear as links when the details are shown for the course:

The screenshot shows a Joomla administrator interface. At the top, there's a search bar and a toolbar with icons for adding, deleting, and filtering by year (Yr), term (Term), course (Course), credits (Cr), and title. Below this is a table with course information:

	Yr	Term	Course	Cr	Title	Cr
±	2021	Fall	16:700:501	3.00	Introduction to Music Research	

Below the table, course details are listed:

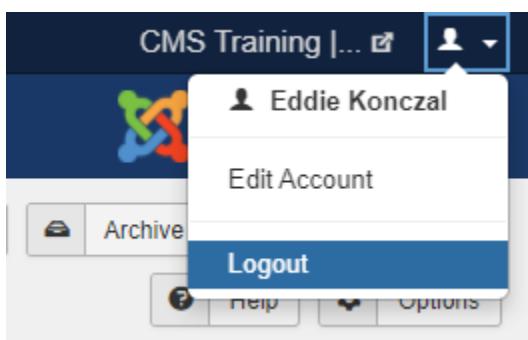
Fall 2021: Introduction to Music Research Section: 01 (Index: 06176)  
Professor: JOHNSON  
Credits: 3.00  
• T 0300 PM - 0600 MUS 109 D/C Lec

A red box highlights the word "Syllabus" in the course details, which is a link. Below this is another table row:

±	2021	Fall	16:700:503	3.00	Current Issues in Ethnomusicology	
---	------	------	------------	------	-----------------------------------	--

### LOGOUT FROM JOOMLA!

Click the profile icon to the upper right of your Joomla! administrator page, then click "Logout":



### FUTURE WORKSHOPS

Please visit: <https://sas-it.rutgers.edu/itservices/web-development-and-support/workshops-and-training>