



Rainbow™  
CLASSROOM

R A I N B O W   C L A S S R O O M – M O O D L E   I N T E G R A T I O N   G U I D E

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# Rainbow Classroom

(Moodle Integration Guide)



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CLASSROOM

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## 1 Document History

| Edition | Date       | Changes / Comments / Details   |
|---------|------------|--|
| 01      | 30/09/2020 | Initial Moodle Integration Guide   |
| 02      | 10/03/2021 | Overview has been added.<br>Screenshots have been updated.   |
| 03      | 26/05/2021 | Screenshots and details have been updated.   |
| 04      | 09/07/2021 | Screenshots and details have been updated.   |
| 05      | 06/08/2021 | Screenshots and details have been updated about guest users.   |
| 06      | 23/10/2021 | Reference to documents for 'Rainbow Classroom Provisioning - Moodle Links' utility has been added.   |
| 07      | 27/10/2021 | Sequence of steps to setup Moodle API Integration with Rainbow Classroom has been modified.<br>New section about creating an external service in moodle has been added.<br>Details about access token generation has been updated.   |
| 08      | 25/07/2022 | Legal notice has been updated.<br><b>Section 2.1</b><br>List of features has been updated.<br><b>Section 3.1</b><br>Note has been added.<br><b>Section 4.1</b><br>Screenshots have been updated.<br><b>Section 5.2</b><br>Screenshots have been updated.<br><b>Section 6.1</b><br>Notes have been added. |

## 2 Introduction

### 2.1 Overview – The Product

Rainbow Classroom is a SaaS (Software as a Service) solution that offers powerful collaboration and learning tools for education and training institutes. It enhances and provides a deep integration with industry leading Learning Management Systems (LMS). Organisations can keep their existing LMS e.g. Moodle and create an integrated learning and teaching experience for both students and teachers alike. The integration with LMS works via the LTI (Learning Tools Interoperability) protocol while the internal Moodle APIs are also used for extended integration.

Enhanced integration with Moodle enables education institutes to leverage new collaboration methods without having to spend energy on changing their existing LMS solutions. Rainbow Classroom provides a range of collaboration features for better management of classroom sessions including:

- Centralised administration
- Dashboard for live and upcoming classroom sessions
- KPIs and attendance module
- School and teacher level classroom configuration controls
- Audio and video conferencing
- Screen-share for both students and teachers
- Course content sharing
- Classroom session recording
- Online and offline whiteboards
- Workgroups for offline collaboration between students and breakout rooms for in-call collaboration
- Classwork
- Welcome Screen, Course Material and Links
- Watch Together
- Breakout & Exams rooms

More information on the back office administration and live classroom features that enrich the attendee experience can be found in Rainbow Classroom user and administration guides.

### 2.2 Overview – The Guide

The purpose of this document is to explain the process of integrating Rainbow Classroom with Moodle LMS. This guide expects the user to be a Moodle administrator, which is the access level required for the necessary configuration in Moodle to integrate Rainbow Classroom. Apart from course details, the integration also makes it easier for teachers and students to access the Rainbow Classroom directly from Moodle.

This guide goes through the administrative steps required for initial configuration along with screenshots to provide a better understanding and relevant context.

The Table of Contents is also provided at the beginning of this document which includes hyperlinks. These links can be used to jump to sections and topics of focus. Sometimes only small parts of the screen are shown to highlight a specific item or feature of the user interface.

## 3 Setup Moodle API Integration with Rainbow Classroom

Rainbow Classroom leverages Moodle’s open APIs to build an extended learning experience. As part of the configuration of Rainbow Classroom, a new and unique access token needs to be setup in Moodle. The administrator must also enable the web services from Moodle for the API connectivity between LMS and Rainbow Classroom.

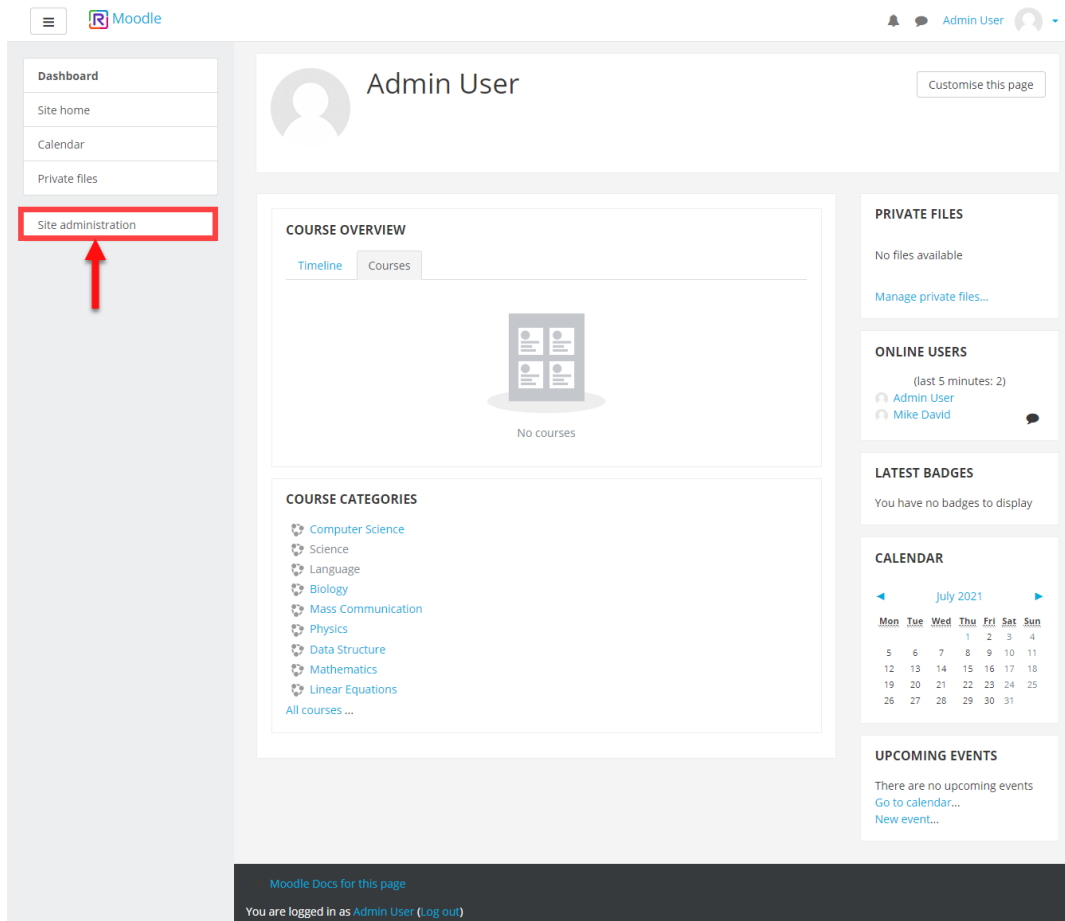
### 3.1 Creating an External Service in Moodle

**Note:** It is important to note that an external service can only be added by a user that has been configured with a role of Moodle administrator.

A new external service has to be added in Moodle Site Administration for integration with Rainbow Classroom. This external service will only use the specific functions of Moodle’s Open APIs that are required by Rainbow Classroom for proper integration.

Following are the steps to create a new external service in Moodle for Rainbow Classroom.

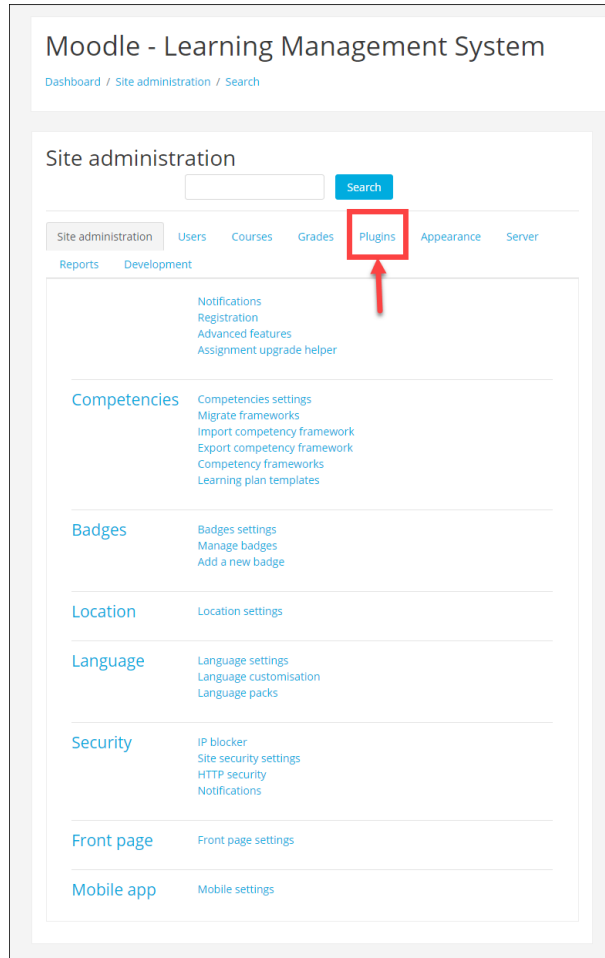
1. Log in to your Moodle account as an administrator.
2. Click on **Site Administration** link in the left menu, as shown below:



Screenshot- Home screen

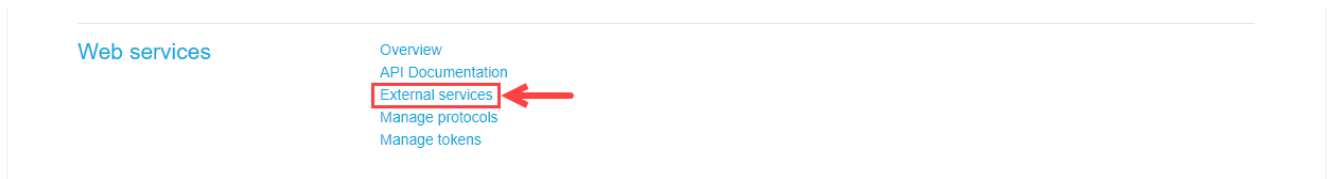
3. You will be presented with site administration screen. On this screen, click on **Plugins** tab as shown below:





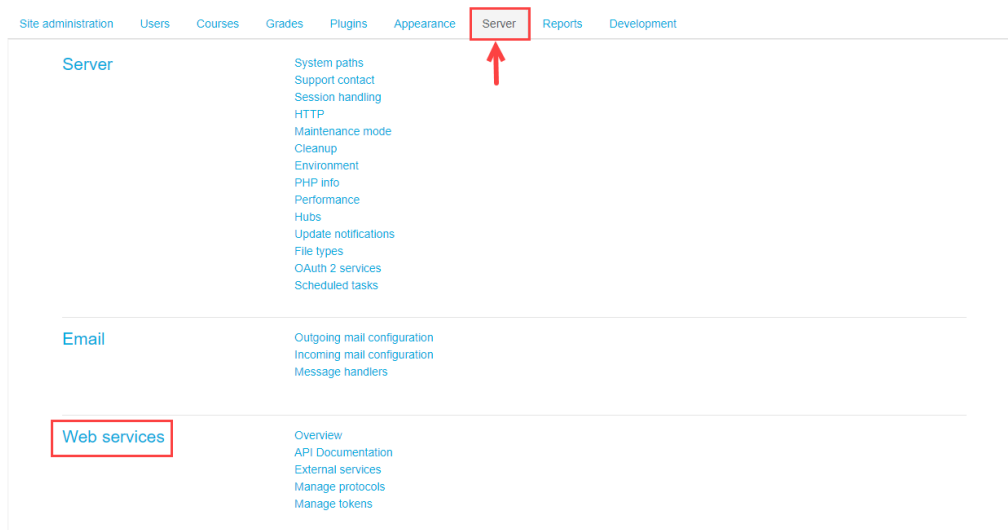
Screenshot- Site Administration

- Once in **Plugins** tab, scroll down to the end of the page and click on the **External Services** option under Web services section, as shown below.



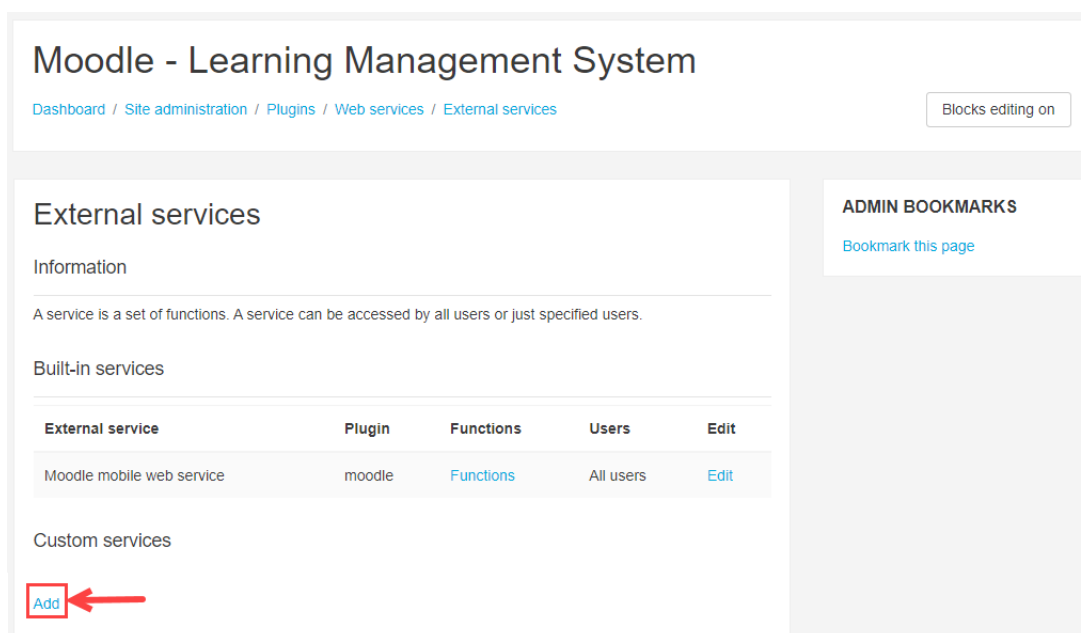
Screenshot- Plugins screen

**Note:** It is important to note here that in some versions of Moodle, Web Services section and External Services option is available in **Server** tab, as shown below:



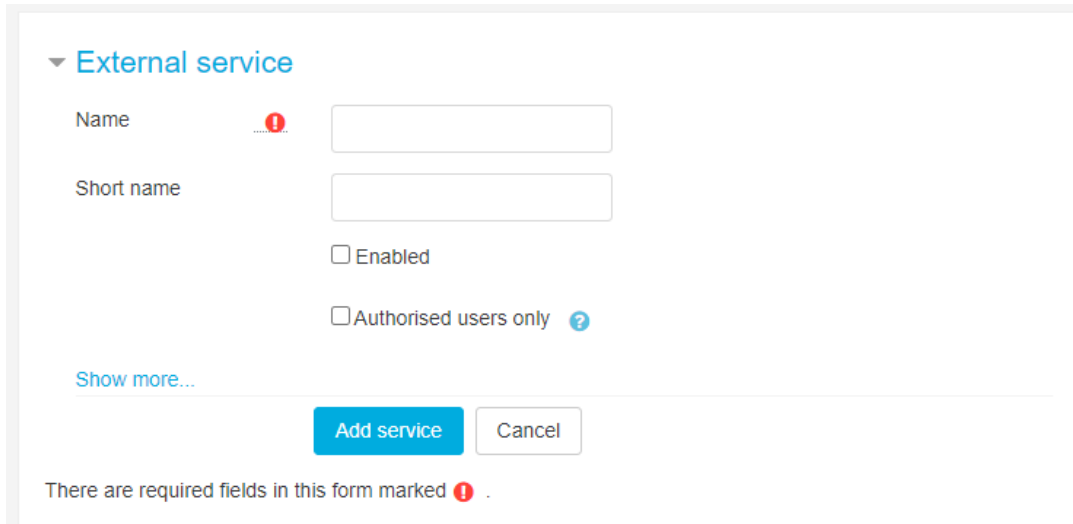
Screenshot- Server screen

- You will be presented with the **External Services** screen. On this screen, click on the **Add** link to create an external service.



Screenshot- Add External Service

- The following screen will be displayed:



Screenshot- Add External Service

Enter the following details:

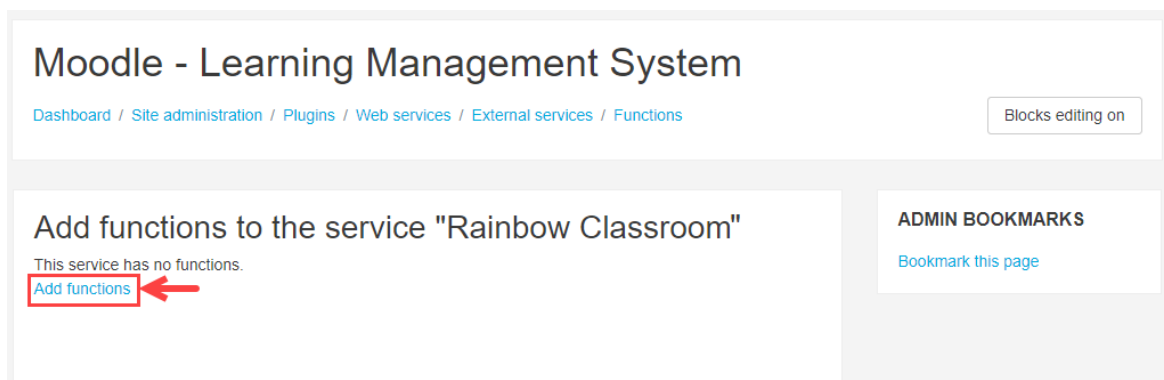
**Name:** Add **Rainbow Classroom** in this field.

**Note:** A user can enter a name of their own choice as well in the **Name** field.

Check Both **Enabled** and **Authorised users only** options.

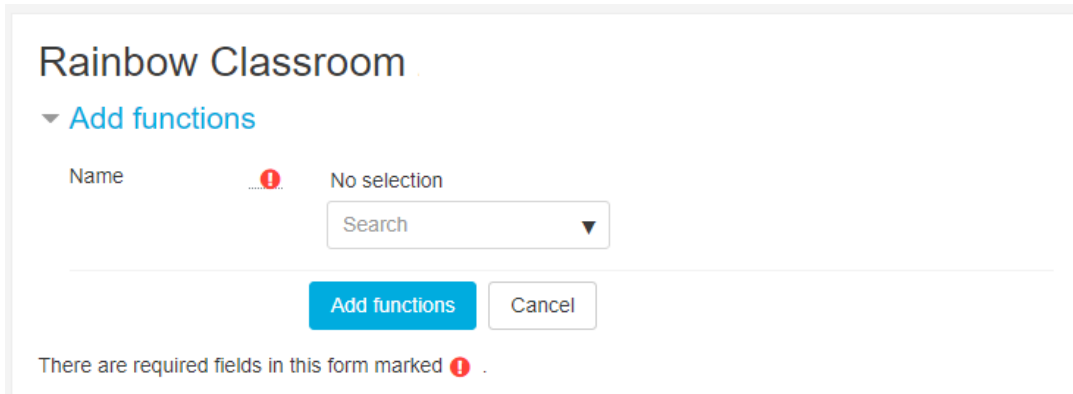
Once done, click on **Add service** button.

7. You will be presented with the **Add functions** screen. This option enables you to add specific functions in this service that are required for integration between Moodle and Rainbow Classroom application. Click on **Add functions** option as shown below:



Screenshot- Add functions

8. You will be presented with the following screen where you can add specific functions.



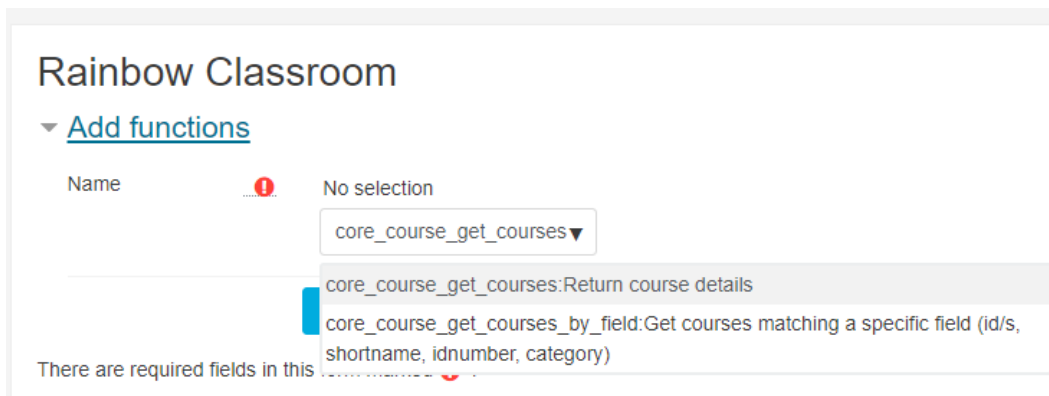
Screenshot- Add functions screen

- Simply copy the following functions one-by-one and paste them in the Name field.

```

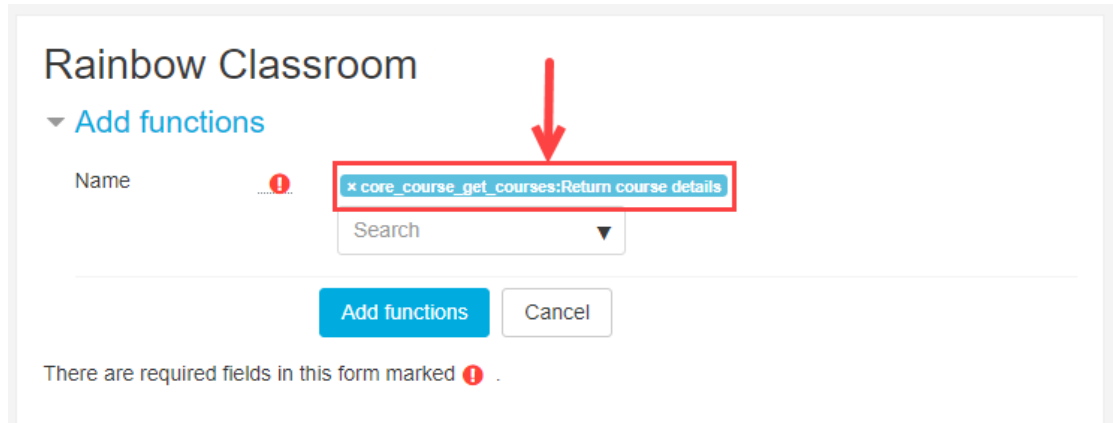
core_course_get_courses
core_enrol_get_enrolled_users
core_enrol_get_users_courses
core_user_get_users_by_field
mod_lti_get_ltis_by_courses
mod_lti_get_tool_proxies
mod_lti_get_tool_types
  
```

A drop down will be shown with your entered function. Please select the appropriate function as shown below:



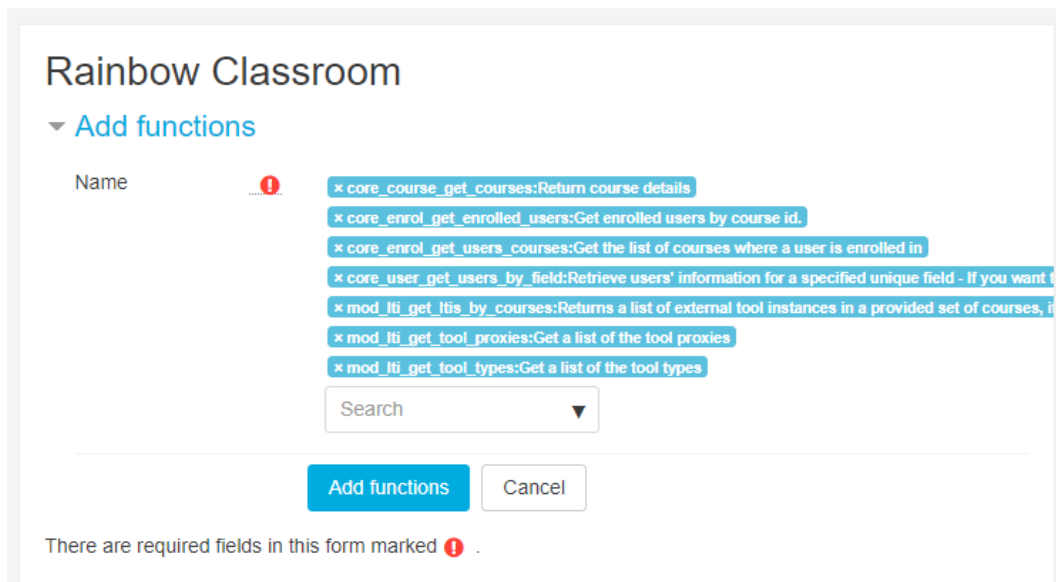
Screenshot- Add functions screen

Once you have selected a function, it will displayed as shown below:



Screenshot- Add functions screen

Once all above listed functions are selected, click on **Add functions** button



Screenshot- Add functions screen

Following screen will be displayed:

| Add functions to the service "Rainbow Classroom" |  |  |                        |
|--|--|--|------------------------|
| Function   | Description  | Required capabilities  | Edit                   |
| core_course_get_courses                          | Return course details  | moodle/course:view,<br>moodle/course:update,<br>moodle/course:viewhiddencourses  | <a href="#">Remove</a> |
| core_enrol_get_enrolled_users                    | Get enrolled users by course id.   | moodle/user:viewdetails,<br>moodle/user:viewhiddendetails,<br>moodle/course:useremail,<br>moodle/user:update,<br>moodle/site:accessallgroups | <a href="#">Remove</a> |
| core_enrol_get_users_courses                     | Get the list of courses where a user is enrolled in  | moodle/course:viewparticipants   | <a href="#">Remove</a> |
| core_user_get_users_by_field                     | Retrieve users' information for a specified unique field - If you want to do a user search, use core_user_get_users()  | moodle/user:viewdetails,<br>moodle/user:viewhiddendetails,<br>moodle/course:useremail,<br>moodle/user:update                                 | <a href="#">Remove</a> |
| mod_lti_get_ltis_by_courses                      | Returns a list of external tool instances in a provided set of courses, if no courses are provided then all the external tool instances the user has access to will be returned. | mod/lti:view   | <a href="#">Remove</a> |
| mod_lti_get_tool_proxies                         | Get a list of the tool proxies   | moodle/site:config   | <a href="#">Remove</a> |
| mod_lti_get_tool_types                           | Get a list of the tool types   | moodle/site:config   | <a href="#">Remove</a> |

[Add functions](#)

Screenshot- Add functions screen

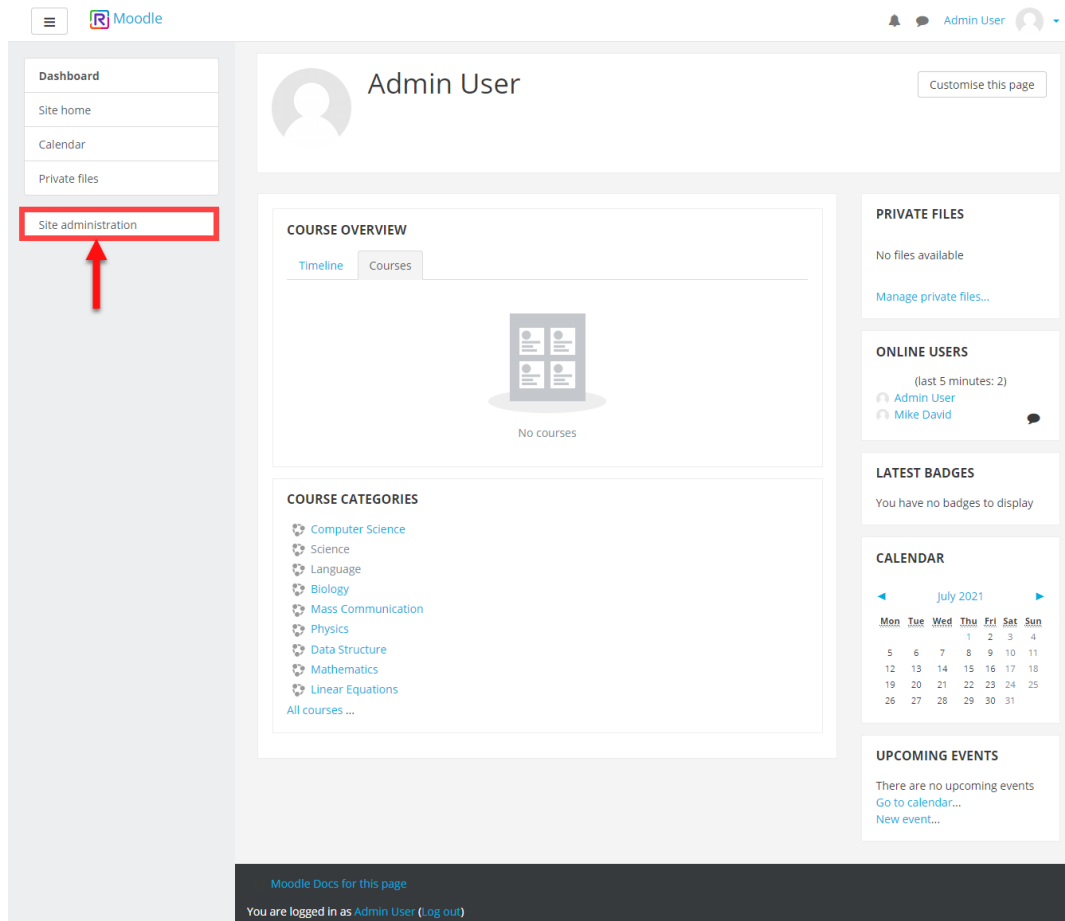
Now access tokens for integration can be generated using this newly added external service.

## 3.2 Creating a New Access Token in Moodle

**Note:** It is important to note that an access token can only be generated by a user that has been configured with a role of Moodle administrator.

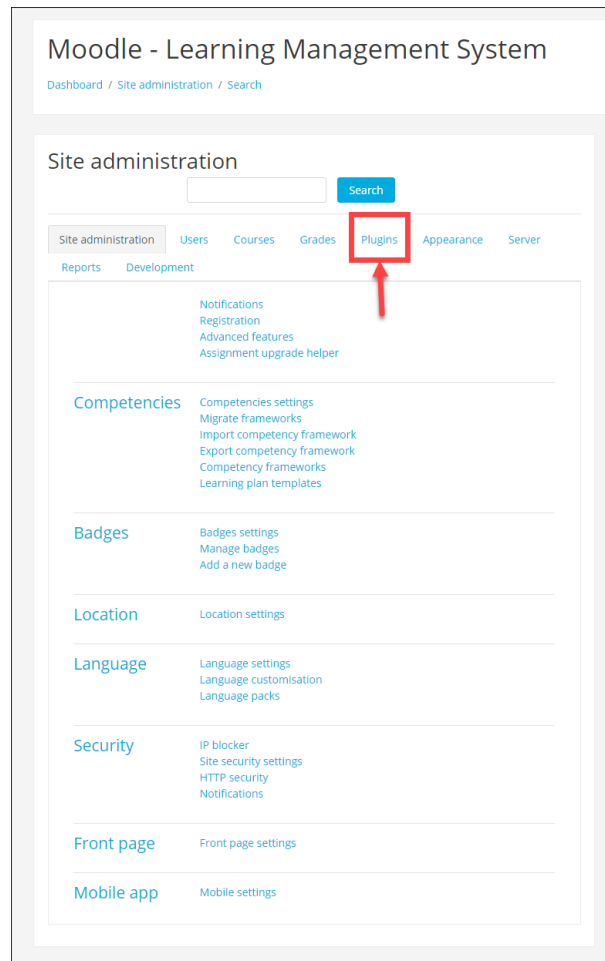
Following are the steps to create a new and unique API access token for Rainbow Classroom.

1. Click on **Site administration** link in the left menu, as shown below.



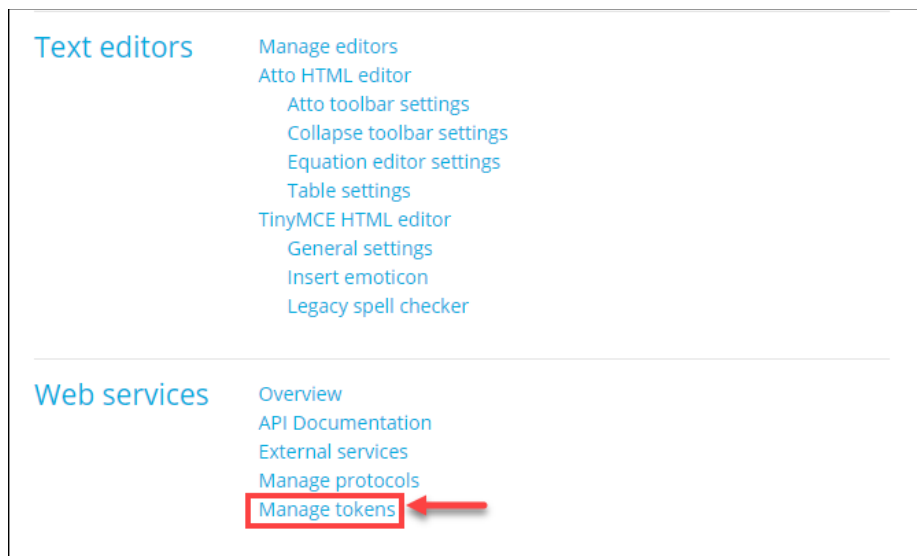
Screenshot- Home screen

2. You will be presented with site administration screen. On this screen, click on **Plugins** tab as shown below.



Screenshot- Site Administration

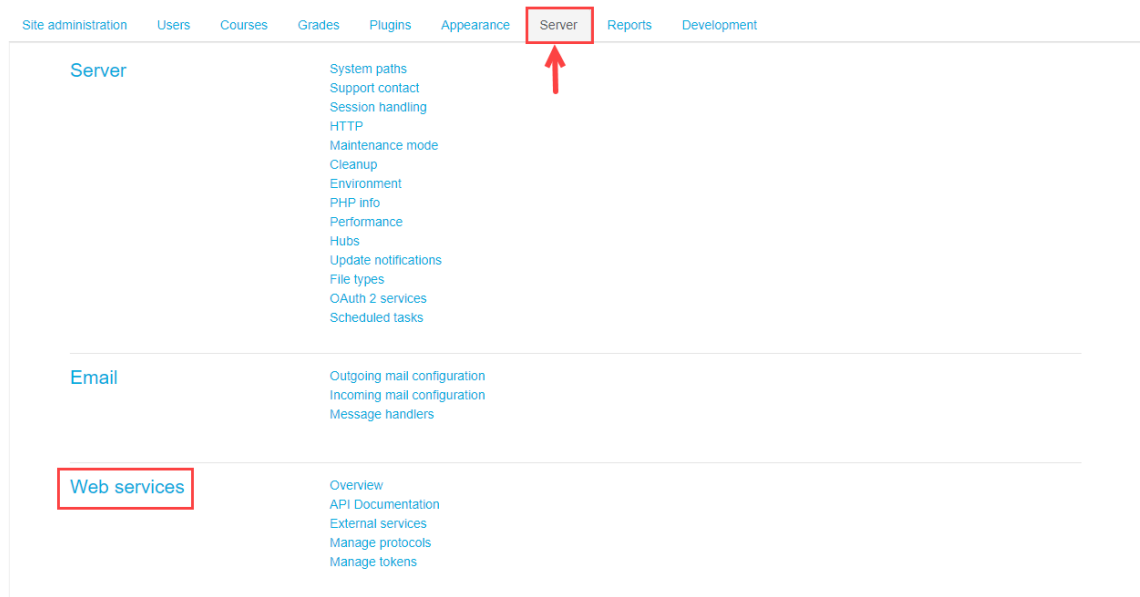
- Once in **Plugins** tab, scroll down to the end of the page and click on the **Manage tokens** option under **Web services** section, as shown below.



Screenshot- Plugins screen

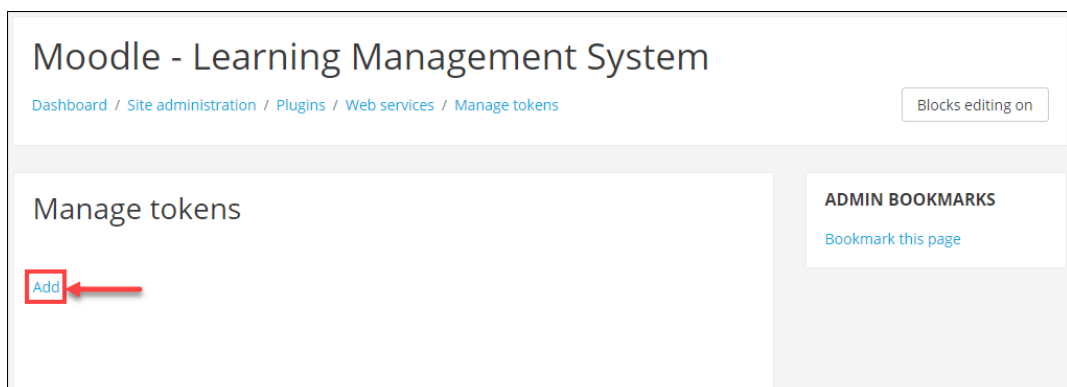
**Note:** It is important to note here that in some versions of Moodle, Web Services section and Manage Tokens option is available in **Server** tab, as shown below:





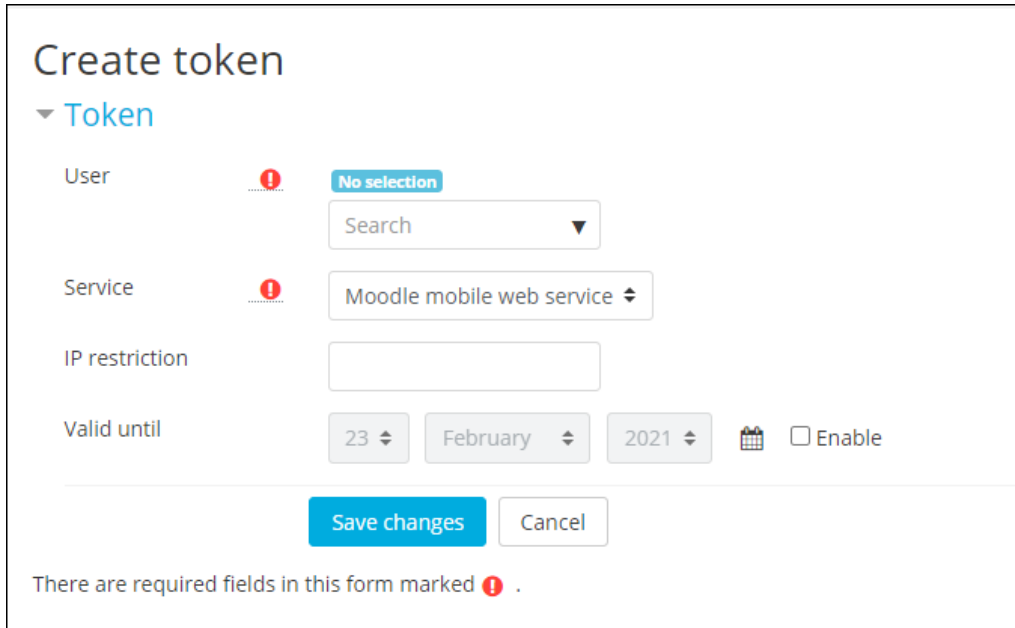
Screenshot- Server screen

- You will be presented with the **Manage tokens** screen. On this screen, click on the **Add** link to generate a token.



Screenshot- Generate Access Token

- The following screen will be displayed.



Screenshot- Generate Access Token


Enter the following details:

**User:** Select **Admin User** from the dropdown menu of the respective field to create a token for the LMS administrator.

**Service:** Select **Rainbow Classroom** service from the dropdown menu of the respective field.

**IP restriction:** Leave the IP restriction field blank in order to avoid any IP restriction.

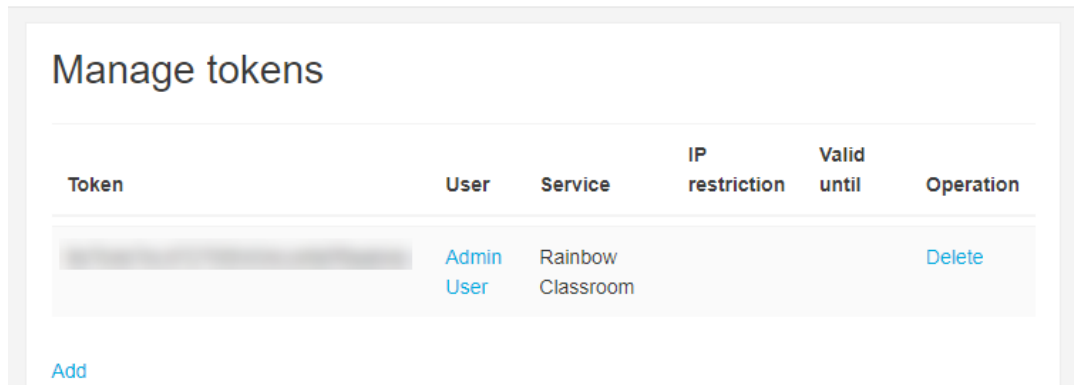
**Note:** In case if limited access is required for your Moodle account then enter the predefined IP address in the respective field. Rainbow Classroom is capable of imposing restrictions on users who do not have the same IP address that is provided in the respective field.

**Valid until:** Use this option to specify the date until which the access token is valid. You can check the enable box and specify the date through  icon or use the three dropdown cells.

**Note:** You can leave the **Valid until** option blank for no expiration. If a date is mentioned then a proper process should be put in place to ensure that Rainbow Classroom always has a valid access token for connectivity.

Once done, click on the **Save changes** button.

- Once you have saved changes, the following screen is displayed. **Please copy the Token field and save it for the subsequent configuration of the Rainbow Classroom Administration.**

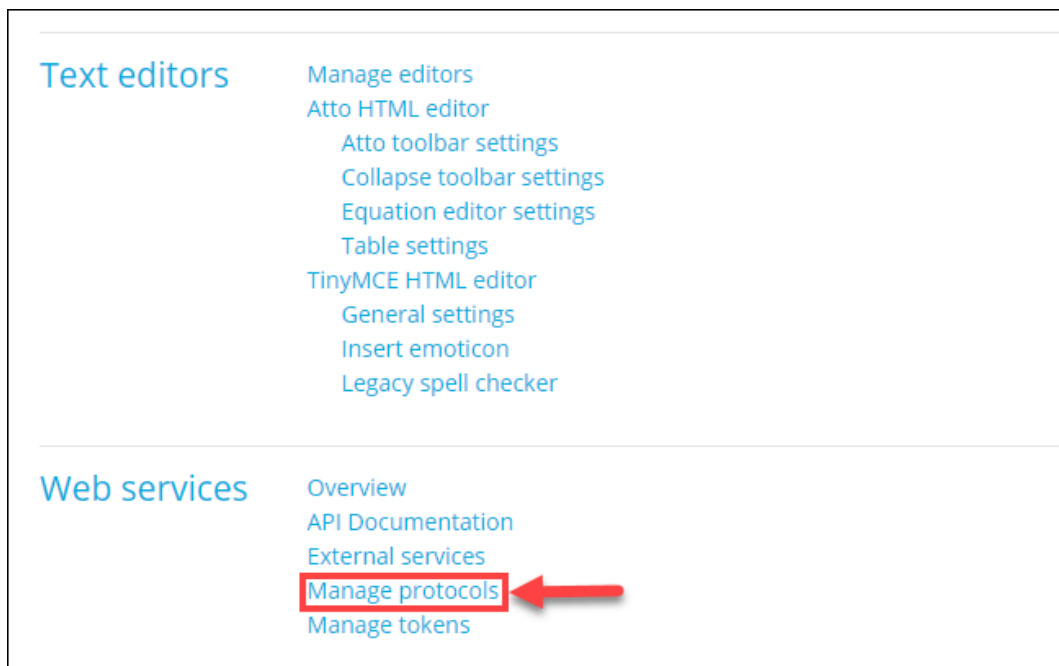


Screenshot- Generate Access Token


### 3.3 Enable Web Services

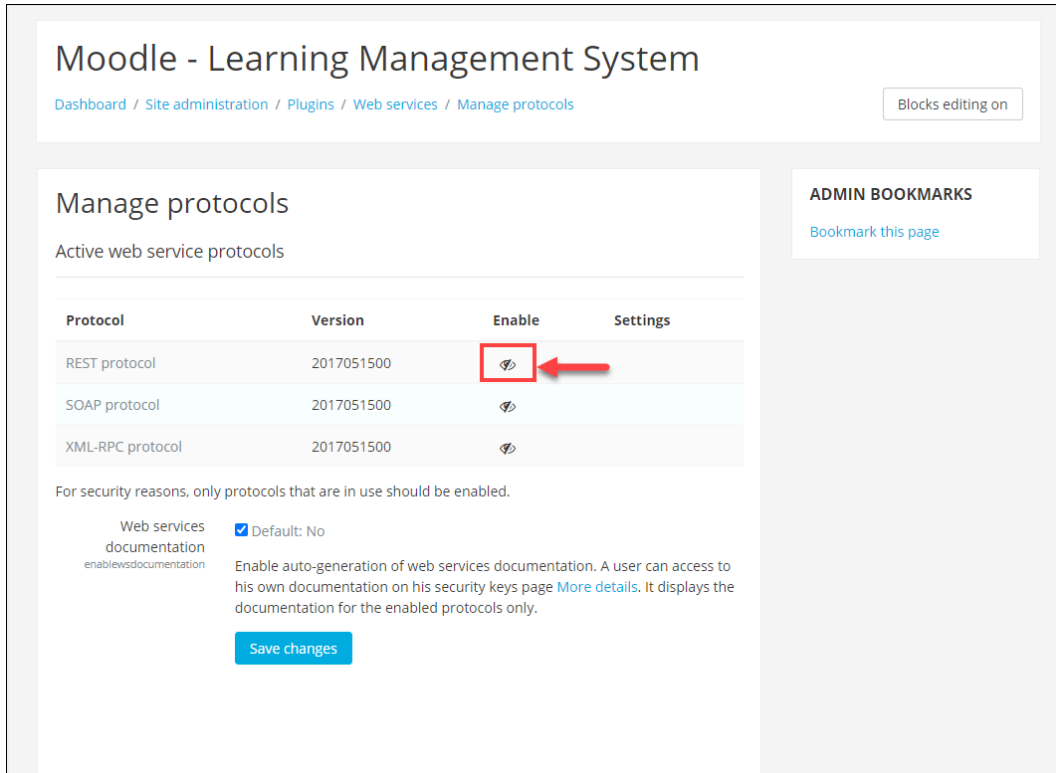
The Moodle administrator needs to enable web services from their account. By doing so, it enables the LMS to provide API access to Rainbow Classroom.

In order to perform this task, go to **Site administration** > **Plugins** tab. Once in the plugins tab scroll down to the end of the page and click on **Manage protocols** under **Web services** section, as shown below.






Screenshot- Enable Web service

You will be presented with the following screen. Due to security reasons, all the protocols are disabled by default. Enable **Rest protocol** by clicking on  icon, as shown below.



The screenshot shows the Moodle 'Manage protocols' page. At the top, the breadcrumb trail is 'Dashboard / Site administration / Plugins / Web services / Manage protocols'. The main heading is 'Manage protocols' with the sub-heading 'Active web service protocols'. A table lists three protocols: REST, SOAP, and XML-RPC, all with version 2017051500. The 'Enable' column for the REST protocol is highlighted with a red box and a red arrow pointing to the eye icon. Below the table, there is a section for 'Web services documentation' with a 'Default: No' checkbox and a 'Save changes' button. On the right side, there is an 'ADMIN BOOKMARKS' section with a 'Bookmark this page' link.

| Protocol         | Version    | Enable  | Settings |
|------------------|------------|---|----------|
| REST protocol    | 2017051500 |  |          |
| SOAP protocol    | 2017051500 |  |          |
| XML-RPC protocol | 2017051500 |  |          |

Screenshot- Enable Web service

### 3.4 Moodle Access Token in Rainbow Classroom Administration

Before proceeding with the other sections of this guide, the newly created API access token needs to be configured in the Rainbow Classroom Administration. It is outside the scope of this document to cover the configuration steps for Moodle connectivity in the Rainbow Classroom Administration.

Please refer to [Rainbow Classroom – Administration Guide for Organisation Admin \(Moodle\)](#) documentation to find out the configuration steps and the place where Moodle access token needs to be provided.

## 4 Setup Rainbow Classroom as Moodle (External) tool

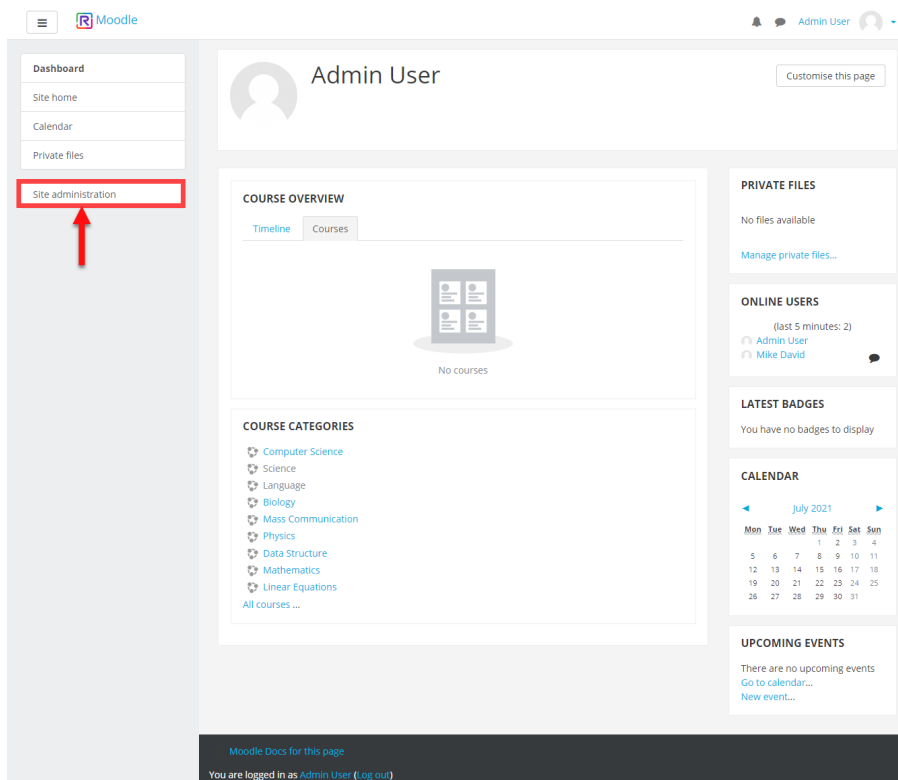
Rainbow Classroom can be added as a tool in Moodle. This makes Rainbow Classroom available right inside the Moodle courses screens for the students, teachers and guest users. Already logged in users can simply click on Rainbow Classroom button and instantly jump to respective Rainbow Classrooms.

**Note:** Rainbow Classroom uses Learning Tool Interoperability (LTI) standard to work as an integrated tool in Moodle.

### 4.1 Creating a New Moodle tool

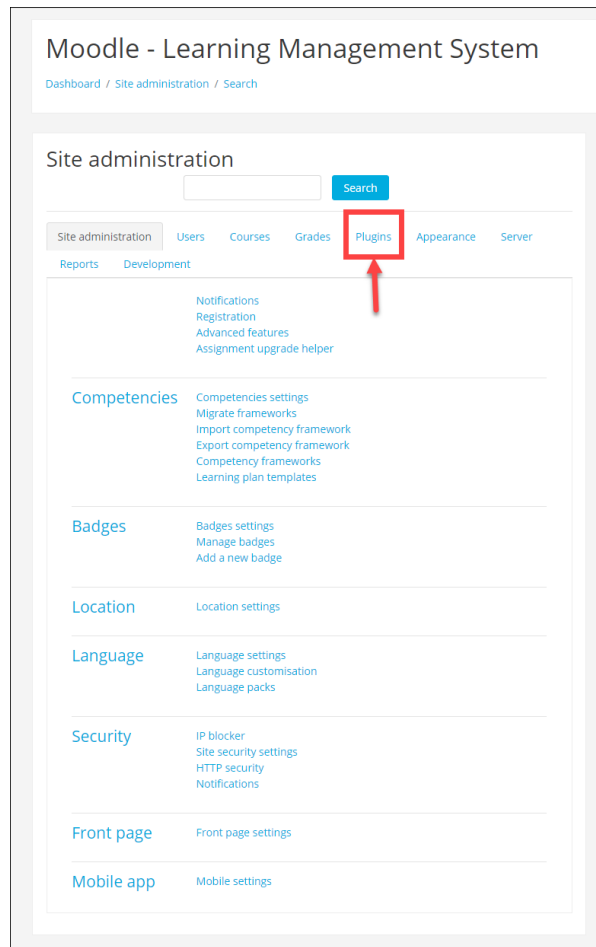
Following are the steps to create a new “tool” in Moodle:

1. Click on **Site administration** link in the left menu, as shown below.



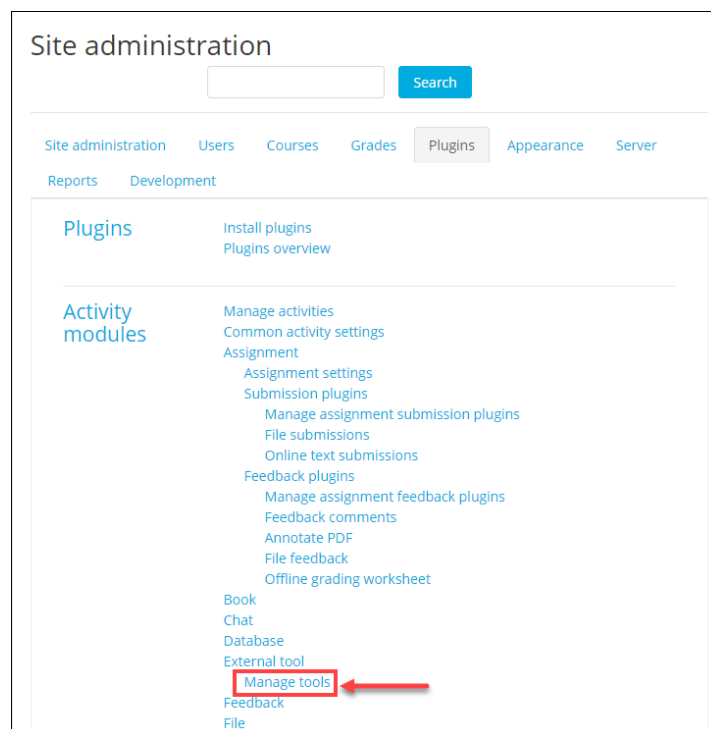
Screenshot- Home screen

2. You will be presented with a site administration screen. On this screen, click on **Plugins** tab as shown below.



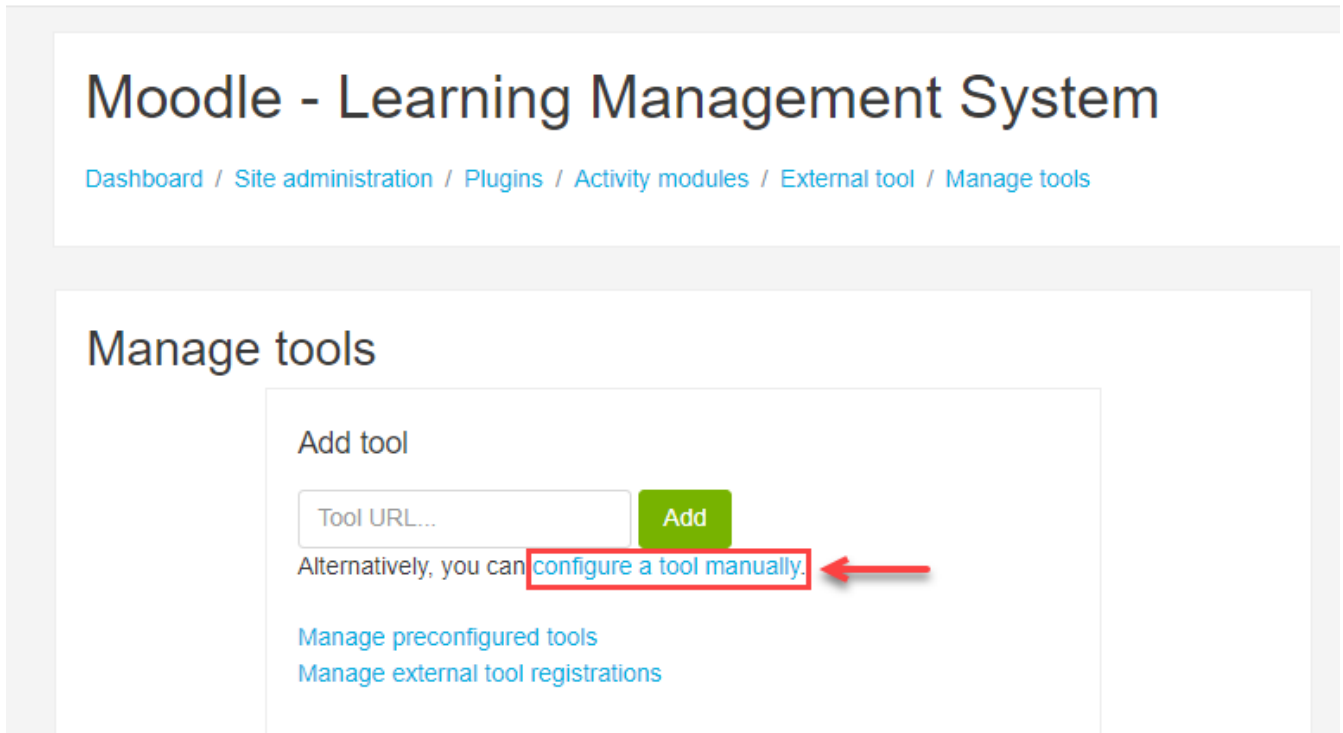
Screenshot- Site Administration

- Once in **Plugins** tab, scroll down and click on the **Manage tools** option under **Activity modules** section, as shown below.



Screenshot- Plugins

4. Following screen is displayed. Click on **Configure a tool manually** link.



Screenshot- Manage Tools

5. You will be presented with the following screen.





**Tool Configuration Usage:** Make an appropriate selection from the dropdown menu.

**Note:** Select this option ‘**Show as preconfigured tool when adding an external tool**’ from the dropdown menu of the respective field if you want this tool to be added to preconfigured tool list. It allows Moodle administrator / teacher to add the preconfigured tool in any course easily.

**Default Launch Container:** Select **Embed** option from the dropdown menu of the respective field.

**Icon URL:** Enter the following URL in the respective field.

[https://web.openrainbow.com/static/logo\\_rainbow.svg](https://web.openrainbow.com/static/logo_rainbow.svg)

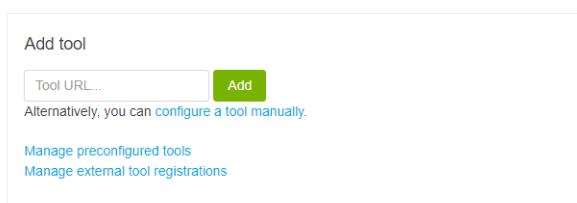
**Secure Icon URL:** Enter the following URL in the respective field.

[https://web.openrainbow.com/static/logo\\_rainbow.svg](https://web.openrainbow.com/static/logo_rainbow.svg)

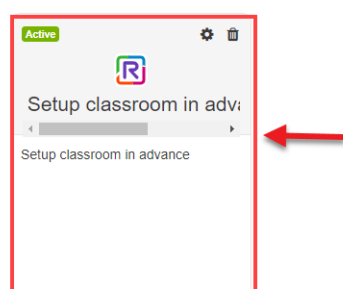
**IMPORTANT!!** *It is important to note that you will receive **consumer key, shared secret and authentication token** via email only after the integration configuration of your organisation admin account for the Rainbow Classroom Administration. For more details, please refer to the “**Rainbow Classroom – Administration Guide for Organisation Admin (Moodle)**” documentation.*

- Click **Save Changes** button and the newly created tool (Setup Classroom in advance) will be displayed in your tools list, as shown below.

#### Manage tools



#### Tools



Screenshot- Tools

- Repeat the process of adding an external tool as described above. Once you’re on the **External Tool Configuration** screen, enter the following details under the **Tool settings** section.

**Tool name:** Enter ‘Rainbow Classroom’ in the respective field.

**Tool URL:** Enter the following URL of Rainbow Classroom in the respective field that will allow teacher, student and guest to redirect to Rainbow Classroom with a single click.

(<https://classroom.openrainbow.io/lti/classroom>)


**Tool description:** Enter the description in the respective field.

**Consumer Key:** Enter the consumer key provided by Rainbow Classroom team.

**Shared Secret:** Enter the shared secret provided by Rainbow Classroom team.

**Custom parameters:** Enter the authentication token provided by Rainbow Classroom team.

**Note:** Please make sure to place ‘token=’ before entering the authentication token, as shown below.

Custom parameters  

```
token=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJlbWlnb1NvZnR3YXJlliwic3ViIjoiT1BDWFJBUEkiLCJlbWFpbCI6ImFzc2lzdGFuY2VAYW1pZ28tc29mdHdhcmUuY29tliwicm9sZSI6Ik1hbnVmYWNOdXJlcisiK1QVCl6ikZhbHNlIiwiaHR0cDovL3NjaGVtYXMubWlj
```

**Tool Configuration Usage:** Make an appropriate selection from the dropdown menu.

**Note:** Select this option ‘Show as preconfigured tool when adding an external tool’ from the dropdown menu of the respective field if you want this tool to be added to [preconfigured tool list](#). It allows Moodle administrator / teacher to add the preconfigured tool in any course easily.

**Default Launch Container:** Select **New Window** option from the dropdown menu of the respective field that will launch Rainbow Classroom in a separate window.

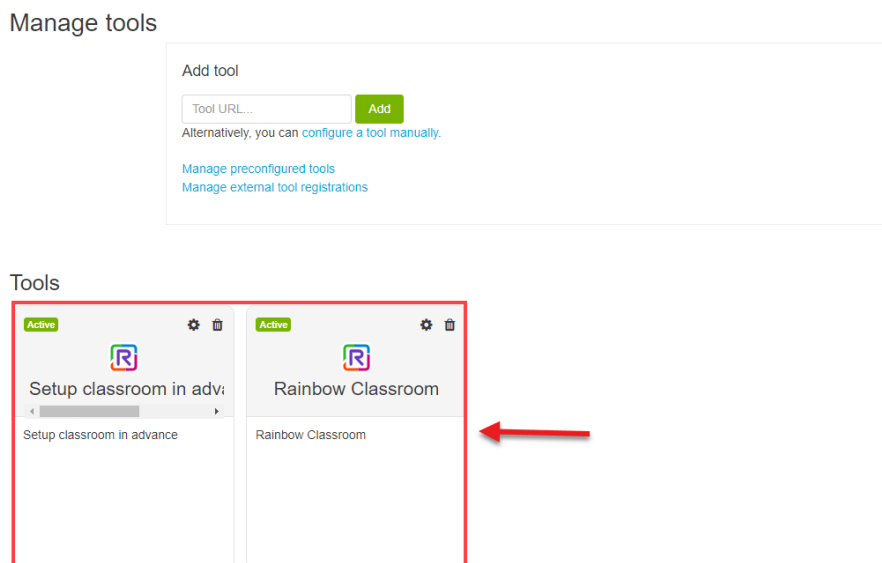
**Icon URL:** Enter the following URL in the respective field.

[https://web.openrainbow.com/static/logo\\_rainbow.svg](https://web.openrainbow.com/static/logo_rainbow.svg)

**Secure Icon URL:** Enter the following URL in the respective field.

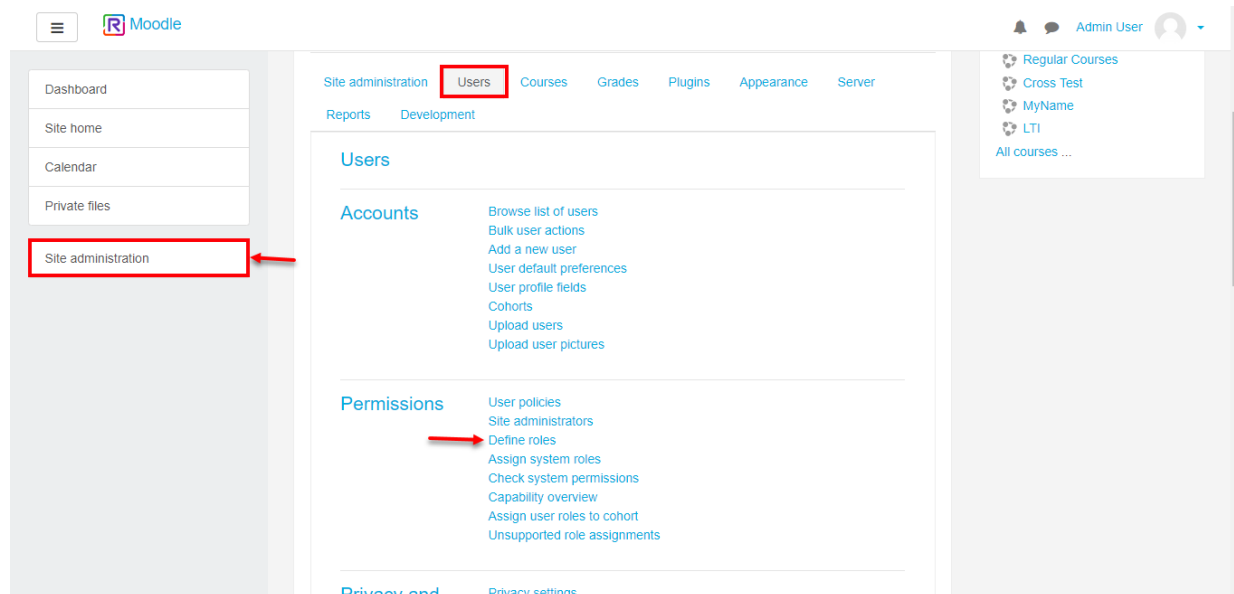
[https://web.openrainbow.com/static/logo\\_rainbow.svg](https://web.openrainbow.com/static/logo_rainbow.svg)

Click **Save Changes** button and the second external tool (Rainbow Classroom) will be displayed in your tools list, as shown below.




























Screenshot- Tools

**IMPORTANT!!** The secondly created 'Rainbow Classroom' external tool will not be available to the guests of the course unless you allow external tool activities for them. To do this, go to the site administration, click on the **Users** tab and then click on the **Define roles** option displayed in the **Permissions** section, as shown below.



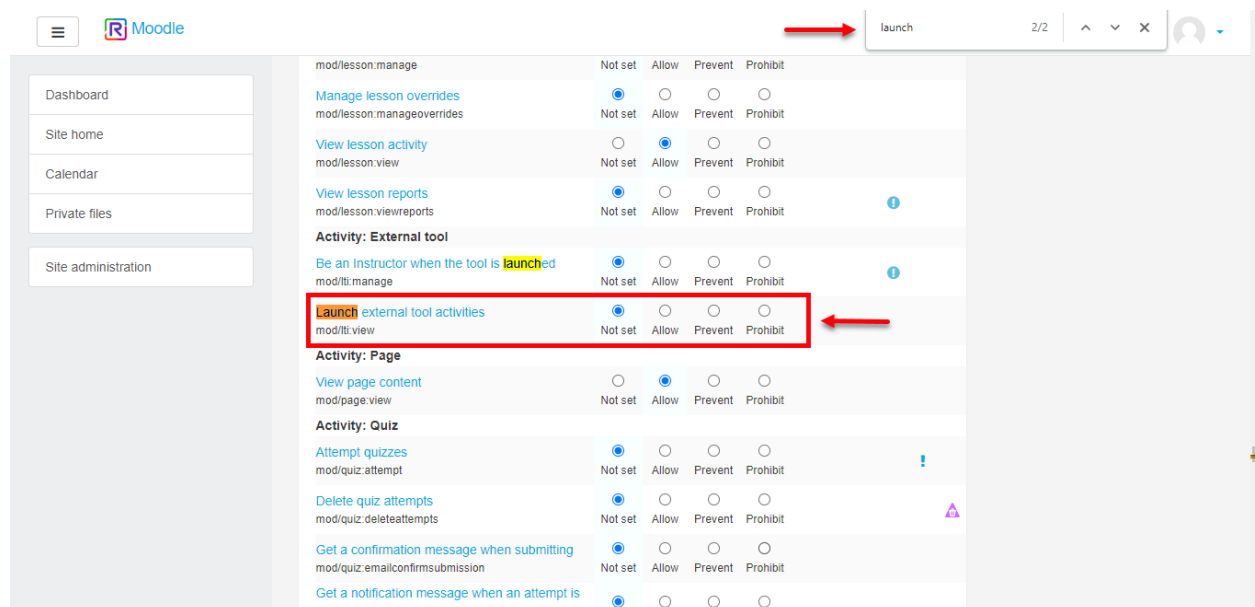
Screenshot- Tools

You will be presented with the following screen. On this screen, click on the Edit icon displayed beside the **Guest** role, as shown below.

| Role ?              | Description   | Short name     | Edit   |
|---------------------|---|----------------|--|
| Manager             | Managers can access course and modify them, they usually do not participate in courses.           | manager        |    |
| Course creator      | Course creators can create new courses.   | coursecreator  |  <br>  |
| Teacher             | Teachers can do anything within a course, including changing the activities and grading students. | editingteacher |  <br>  |
| Non-editing teacher | Non-editing teachers can teach in courses and grade students, but may not alter activities.       | teacher        |  <br>  |
| Student             | Students generally have fewer privileges within a course.   | student        |  <br>  |
| Guest               | Guests have minimal privileges and usually can not enter text anywhere.                           | guest          |  <br>  |
| Authenticated user  | All logged in users.  | user           |  <br>   |

Screenshot- Tools

You will be presented with the **Manage roles** screen. On this screen, use the search key (CTRL + F) to find the **‘Launch external tools activities’** option, as shown below.



The screenshot shows the Moodle 'Manage Roles' page. A search bar at the top right contains the text 'launch'. A table below lists various permissions for different roles. The row for 'Launch external tool activities' is highlighted with a red box, and a red arrow points to the 'Allow' radio button in that row.

| Permission  | Not set                          | Allow                            | Prevent               | Prohibit              |
|---|----------------------------------|----------------------------------|-----------------------|-----------------------|
| mod/lesson:manage                                       | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Manage lesson overrides                                 | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| mod/lesson:manageoverrides                              | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| View lesson activity                                    | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| mod/lesson:view   | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| View lesson reports                                     | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| mod/lesson:viewreports                                  | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| Activity: External tool                                 |                                  |                                  |                       |                       |
| Be an Instructor when the tool is launched              | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| mod/lti:manage  | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| Launch external tool activities                         | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| mod/lti:view  | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| Activity: Page  |                                  |                                  |                       |                       |
| View page content                                       | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| mod/page:view   | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| Activity: Quiz  |                                  |                                  |                       |                       |
| Attempt quizzes   | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| mod/quiz:attempt  | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| Delete quiz attempts                                    | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| mod/quiz:deleteattempts                                 | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| Get a confirmation message when submitting              | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| mod/quiz:emailconfirmsubmission                         | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |
| Get a notification message when an attempt is submitted | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> |

Screenshot- Manage Roles

Set the above-mentioned option to **‘Allow’**. This will enable the guest to have access to the Rainbow Classroom link created in the below section [‘Create a New Module for Teacher only’](#).

## 5 Add Rainbow Classroom Tool in Moodle Courses

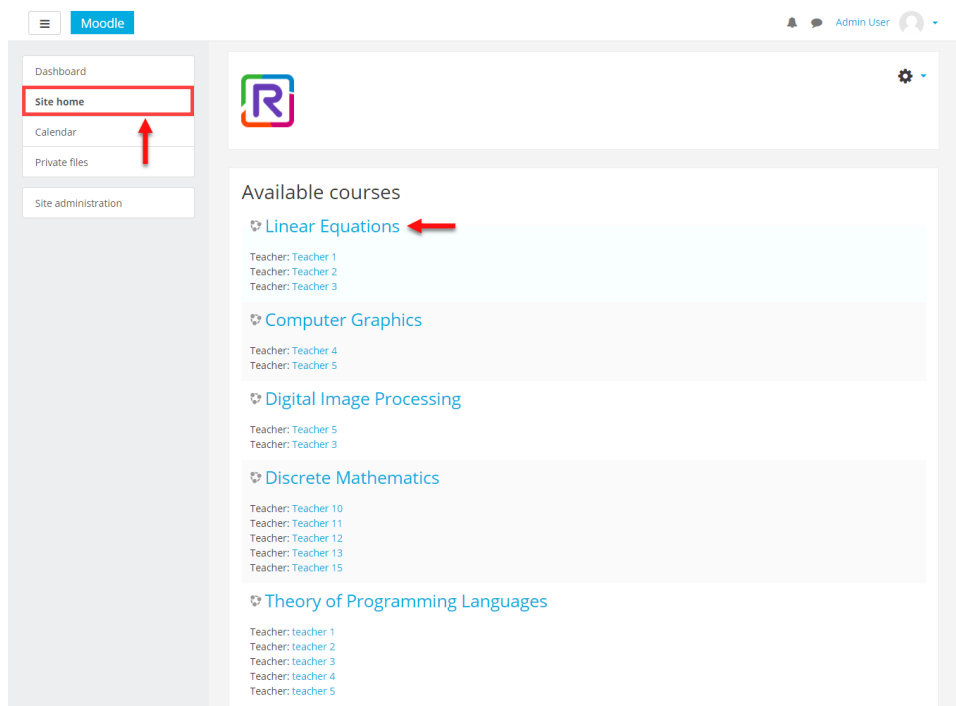
In order to provision Rainbow Classroom accessibility from your Moodle courses, Rainbow Classroom offers both manual and automated ways to achieve this offering. The scope of this document covers the manual procedure for setting up a classroom for a single Moodle course.

The automated process for setting up the Rainbow Classroom accessibility for Moodle courses can be achieved via tool “**Rainbow Classroom Provisioning - Moodle Link**”. Please refer to available [documentation](#) that explains in detail the installation and usage procedure of this tool.

The steps for setting up a classroom for your Moodle course are below:

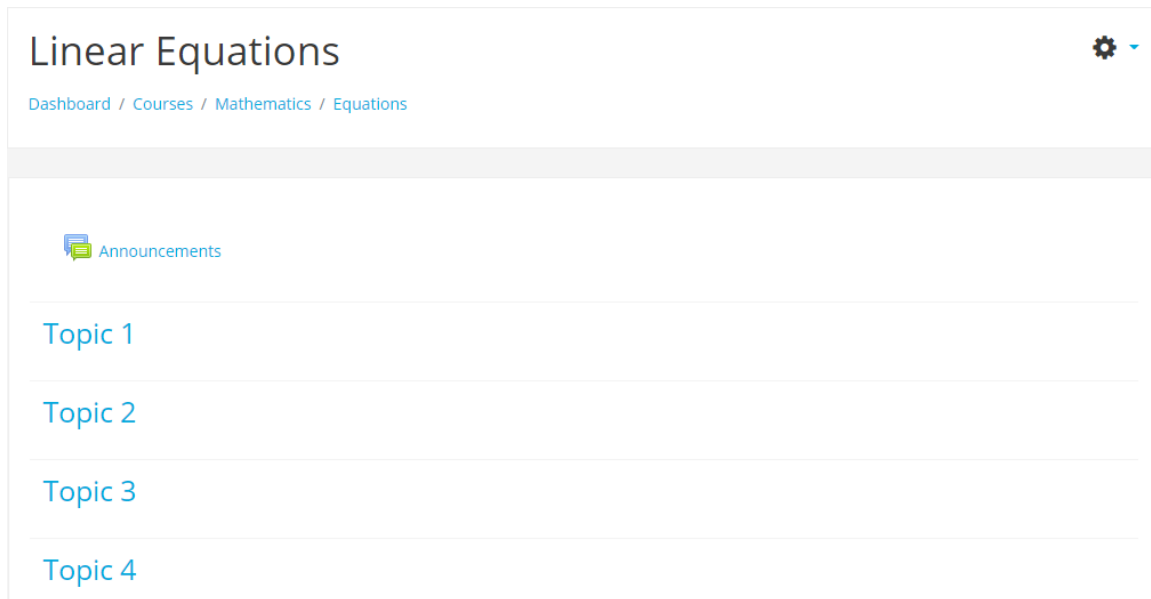
### 5.1 Create a new Classroom Module for Teachers, Students and Guests

1. Go to **Site home** tab from the left menu and click on the specified course, as shown below.




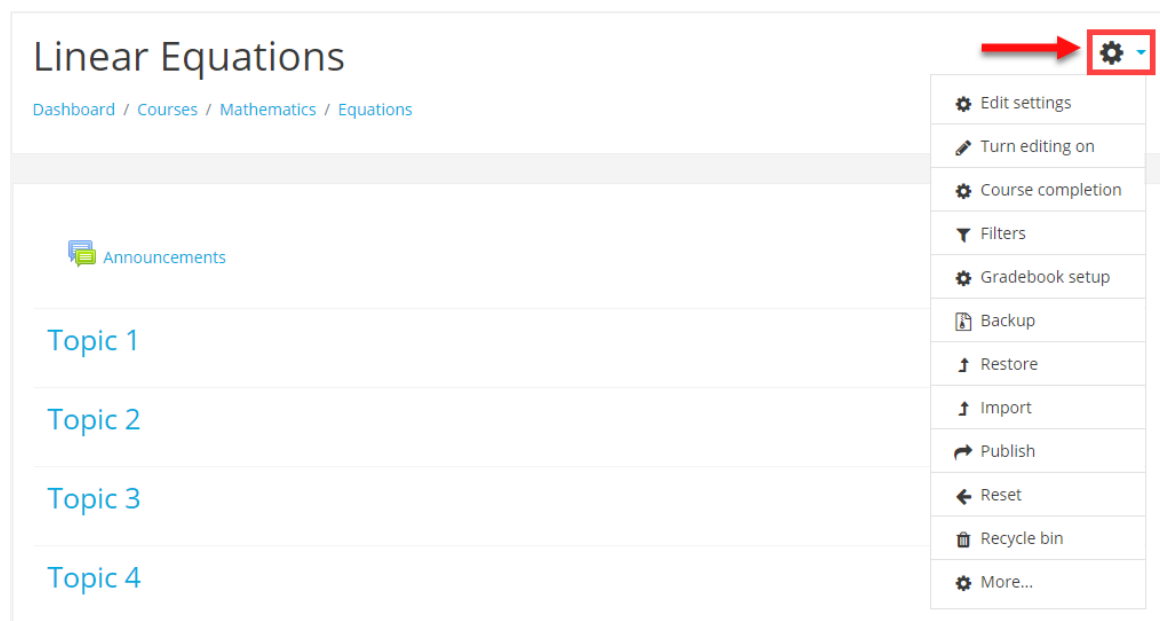
Screenshot- Courses

You will be presented with the following screen:



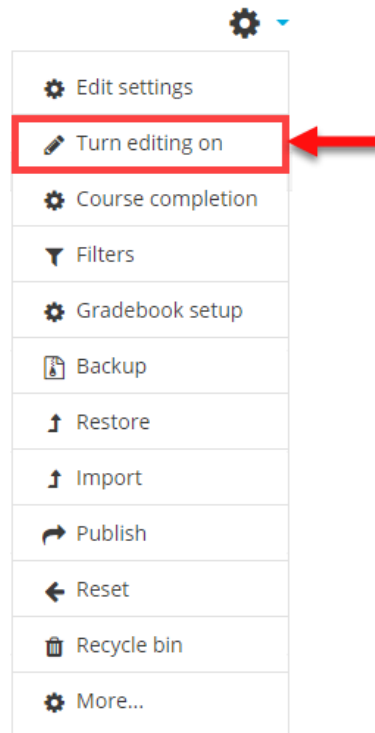
Screenshot- Course

2. Click on  icon in the top right corner and a dropdown menu will be displayed, as shown below.



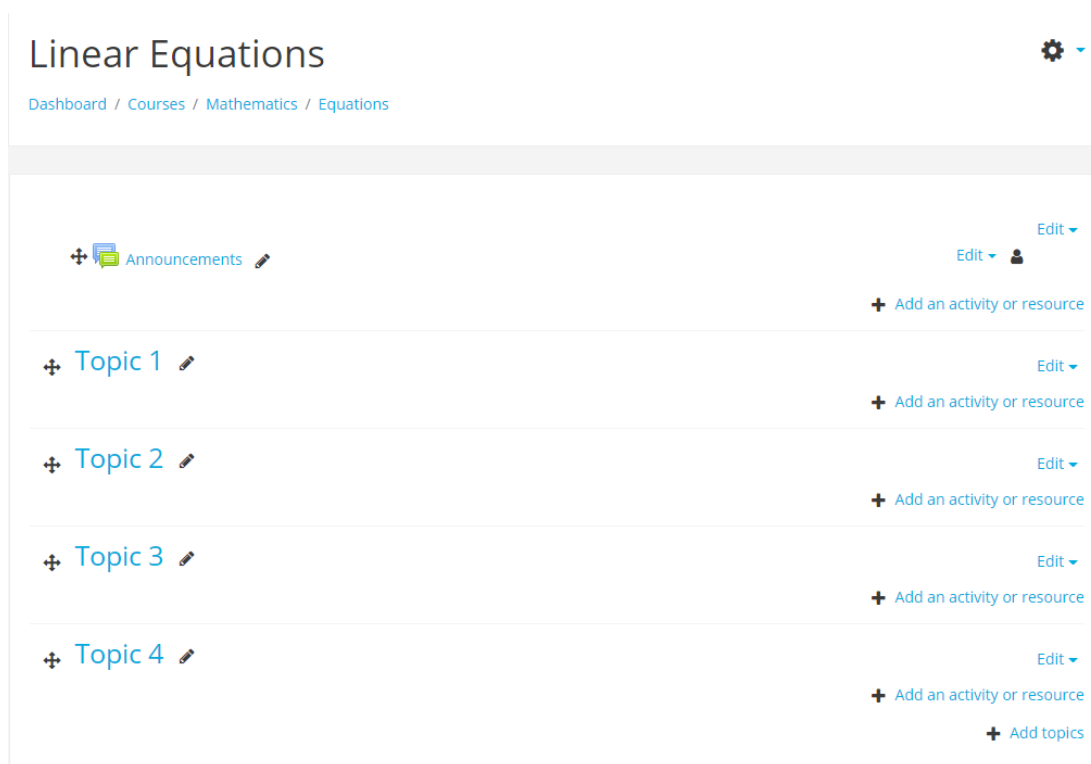
Screenshot- Course

3. Please click on **Turn editing on** option as shown below:




Screenshot- Course Settings

4. This will make the entire section editable and you can configure your Rainbow Classroom environment for that particular course.



Screenshot- Course Settings

**Note:** You will only require ‘Topic 1’ for the external tools of Rainbow Classroom so delete the other topics via **Edit** button beside each topic.

5. Edit topic name by clicking on the edit  icon next to the ‘Topic 1’ and rename it to ‘Rainbow Classroom’. Once done, click enter and topic 1 will be renamed, as shown below.



Screenshot- Add topics

## 5.2 Create a New Classroom Module for Teachers only

With Rainbow Classroom, teachers can setup classrooms and provision new students and guests directly from Moodle.

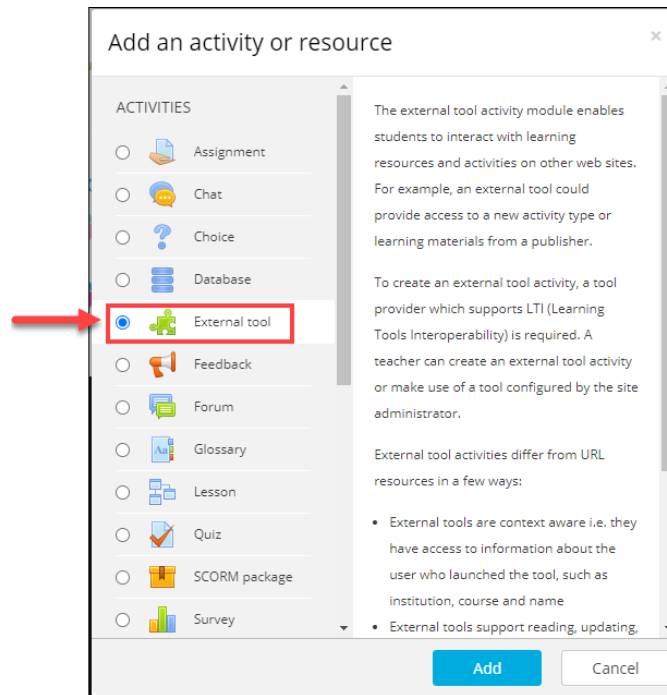
1. Go the module and click on the **Add an activity or resource** on the right side of the screen, as shown below.



[+ Rainbow Classroom](#)[+ Add an activity or resource](#)  
[+ Add topics](#)

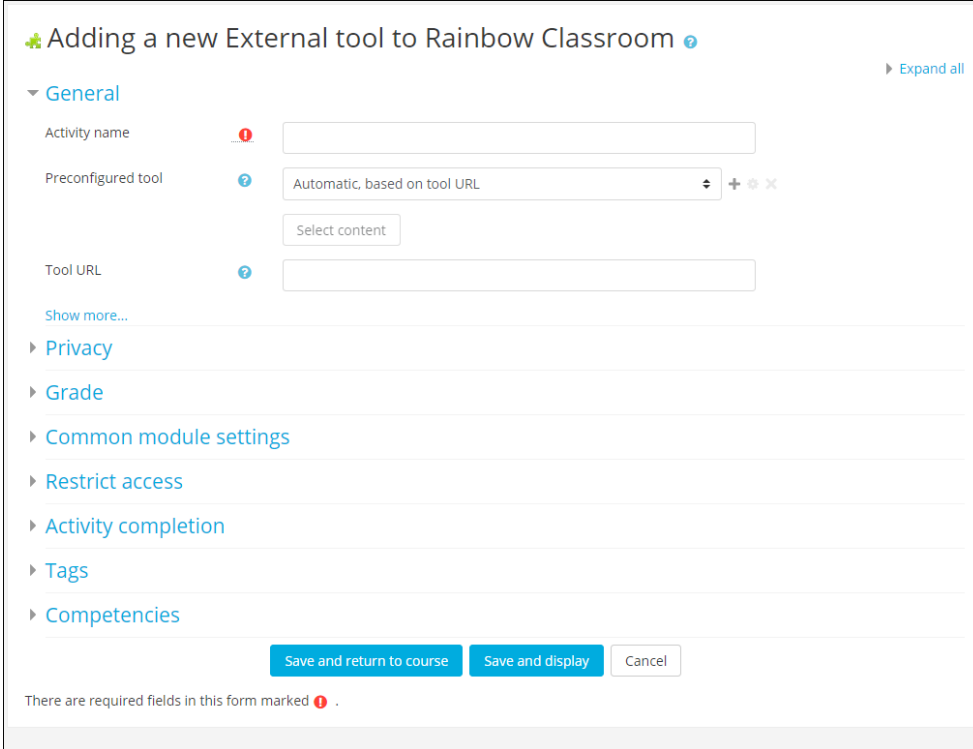
Screenshot- Add an activity or resource

2. The following popup will be displayed. On this screen, click on **External tool** option, as shown below.



Screenshot- Add External Tool

3. Once done, click on **Add** button and you will be presented with the following screen.



Adding a new External tool to Rainbow Classroom [Expand all](#)

**General**

Activity name

Preconfigured tool  [+](#) [-](#) [x](#)

Tool URL

[Show more...](#)

[Privacy](#)

[Grade](#)

[Common module settings](#)

[Restrict access](#)

[Activity completion](#)

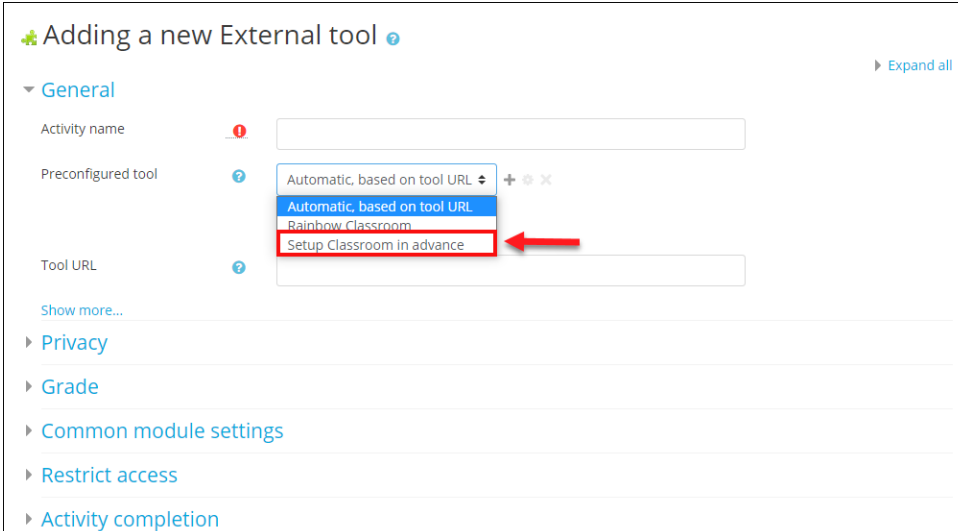
[Tags](#)

[Competencies](#)

There are required fields in this form marked **!**.

Screenshot- Add External Tool

4. Enter an appropriate activity name in the respective field and make sure to select the **Setup Classroom in advance** from the dropdown menu of **Preconfigured tool** field, as shown below.



Adding a new External tool to Rainbow Classroom [Expand all](#)

**General**

Activity name

Preconfigured tool  [+](#) [-](#) [x](#)

Tool URL

[Show more...](#)

[Privacy](#)

[Grade](#)

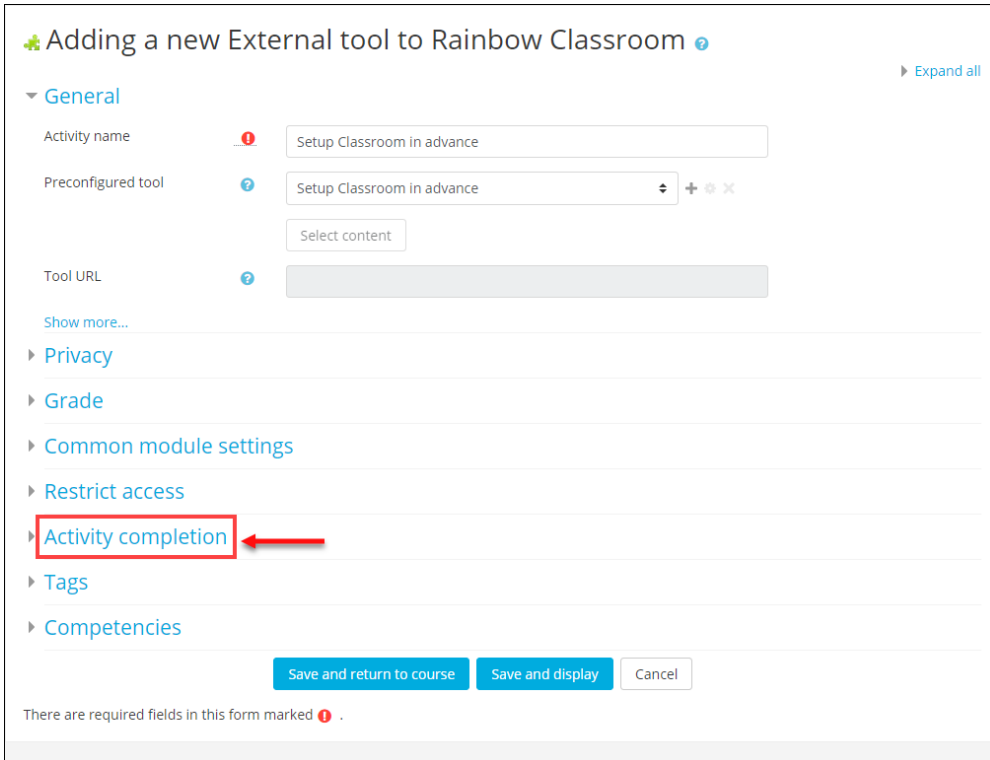
[Common module settings](#)

[Restrict access](#)

[Activity completion](#)

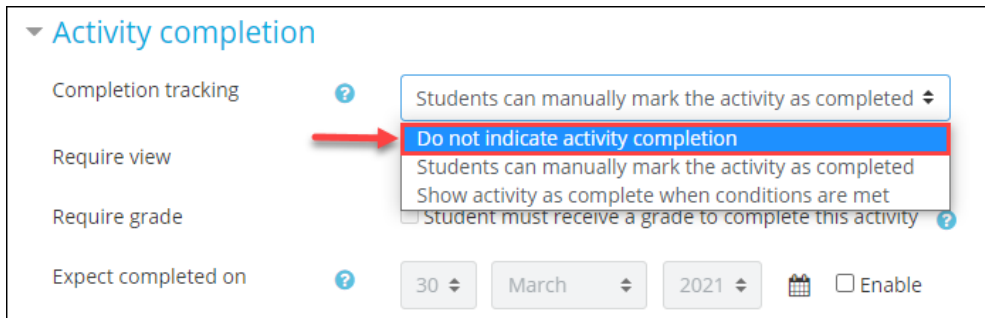
Screenshot- Add External Tool

On the same above screen, scroll down and click on the **Activity completion** option, as shown below.



Screenshot- Add External Tool

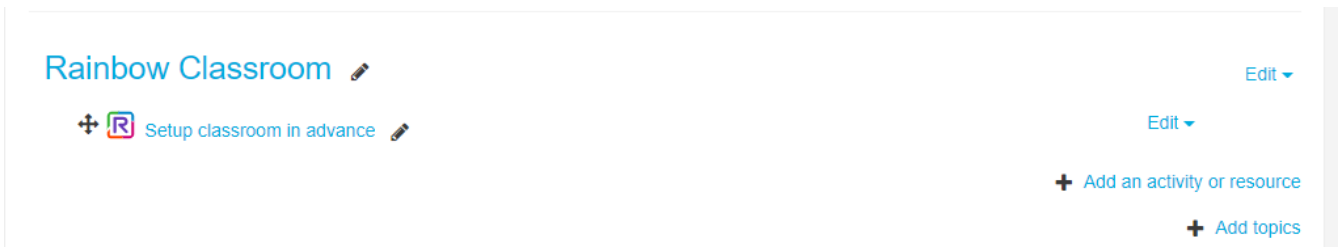
- You will be presented with the following options. The administrator must select the **Do not indicate any activity completion** from the **Completion Tracking** dropdown, as shown below.



Screenshot- Add External Tool

**IMPORTANT!!** The option **Students can manually mark the activity as completed** is selected by default from the **Completion tracking** dropdown but it is not applicable to Rainbow Classroom since it allows teacher and students to track their progress in a course while the Rainbow Classroom tools that are being created here are for setting up and starting a classroom in a course. Hence, when adding Rainbow Classroom to Moodle courses, an administrator must select **Do not indicate any activity completion** option from the respective dropdown to negate this feature.

6. Once done, click **Save and return to course** button. You will be presented with the following screen.



Screenshot- External Tool

7. Repeat the process of adding an external tool as described above. This time select the **Rainbow Classroom** option from the dropdown menu of **Preconfigured tool** field. One instance of an external tool will help to setup Rainbow Classroom session while the other will allow teacher, student and guest to redirect to Rainbow Classroom in order to start / join the respective classroom session.



Screenshot- External Tools

8. To ensure only a teacher can access the **Setup Classroom in advance** option, this option must be hidden to students and guests. In order to perform this task, click on the **Edit** link displayed for the “Setup Classroom in advance” option. A dropdown menu is displayed, click on the **Hide** option as shown below.




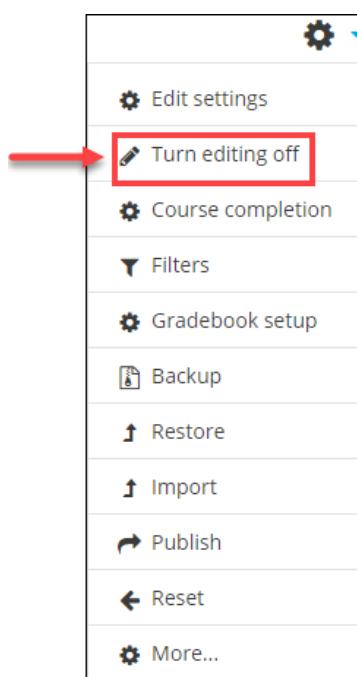
Screenshot- External Tools

9. Upon clicking the **Hide** option, that particular link will be hidden from students and guests as can be seen below:



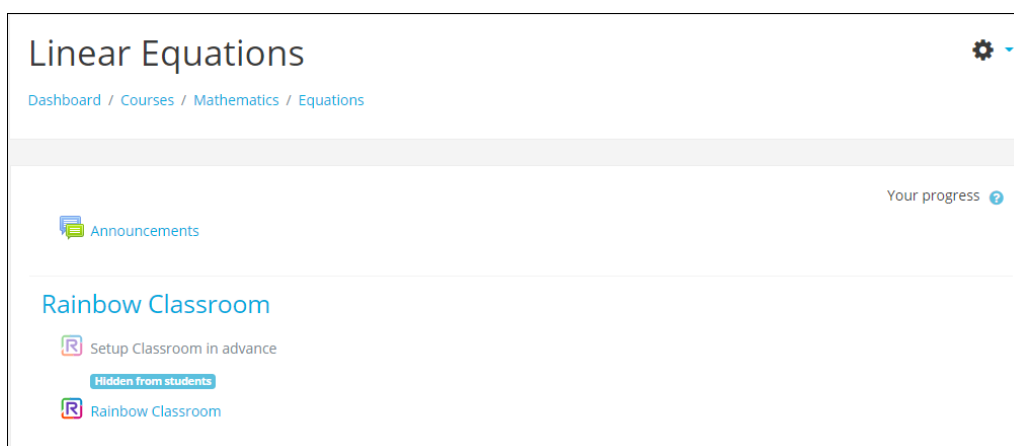
Screenshot- External Tools

10. Once you have completed the configuration process, click on  icon in the top right corner of the section and click **Turn Editing off** option.



Screenshot- Course Settings

This will disable editing options in front of all fields displayed in this section.



Screenshot- External Tools

## 6 Running Rainbow Classroom directly from Moodle

The steps for setting up a classroom for your Moodle course are below:

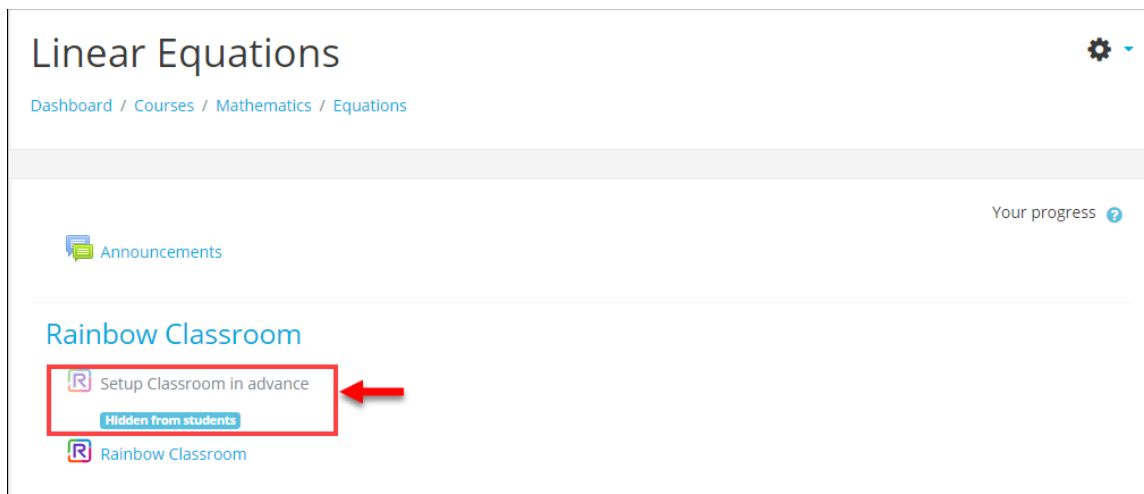
### 6.1 Setup Classroom in advance

Moodle administrator or teacher can configure classrooms via a single link (**Setup Classroom in advance**) in Moodle. This link opens a new window of Rainbow Classroom setup that works as an integrated tool inside Moodle. The setup allows administrators and teachers to select/unselect sections against a particular course, add/remove participants from the classroom(s) and set classroom or individual student rules for the respective classroom sections.

**Note:** Teacher can setup the classroom each time before starting a new classroom session.

Following are the steps to setup Rainbow Classroom for your Moodle course:

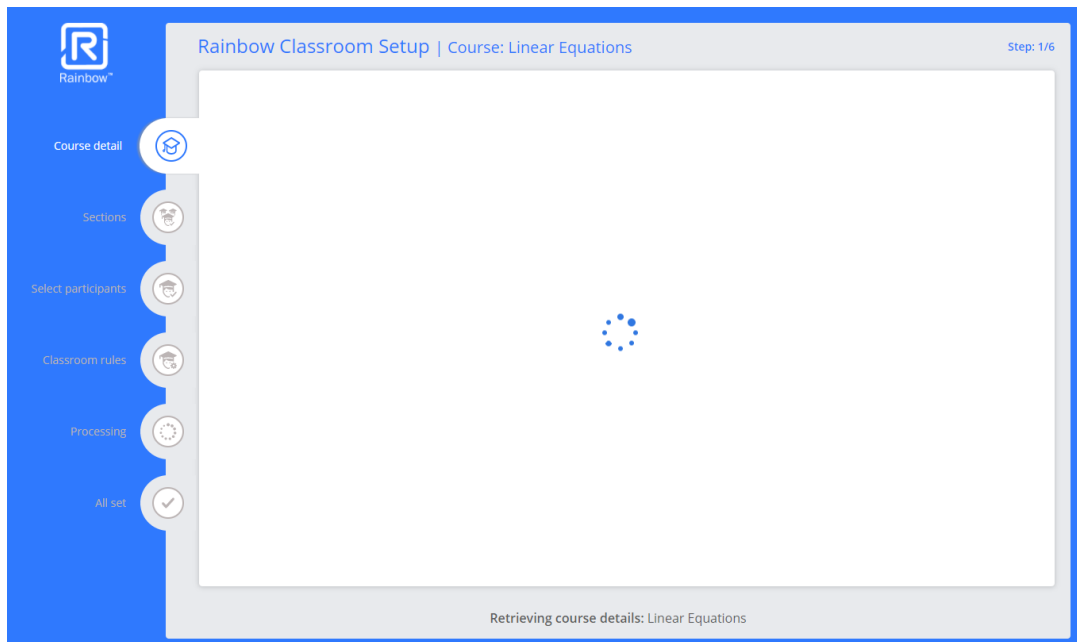
1. In order to setup a classroom, click on the option **Setup Classroom in advance**.



Screenshot- Setup Classroom in advance

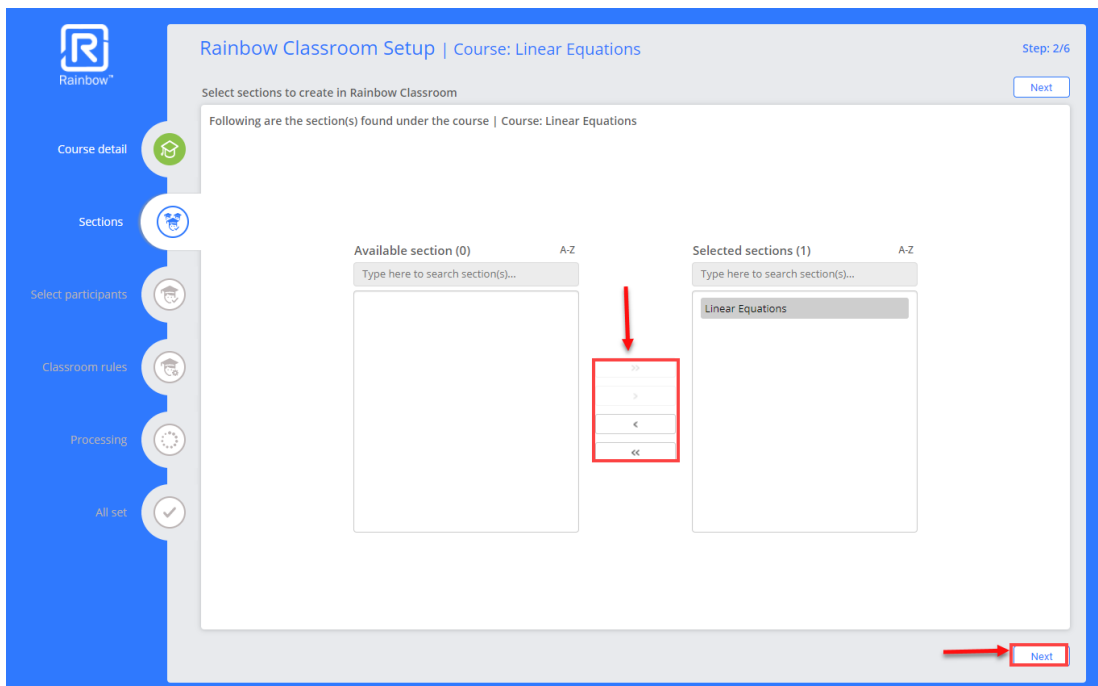
**IMPORTANT!!** Please allow cookies on your browser in order to start the setup of the respective classroom.

You will be presented with the following screen:



Screenshot- Rainbow Classroom LTI Tool

After retrieving the course details, all the available sections are displayed in the box on the left. You can move the sections associated with the course to the box at right by first selecting the section and then using the arrow buttons, as shown below.

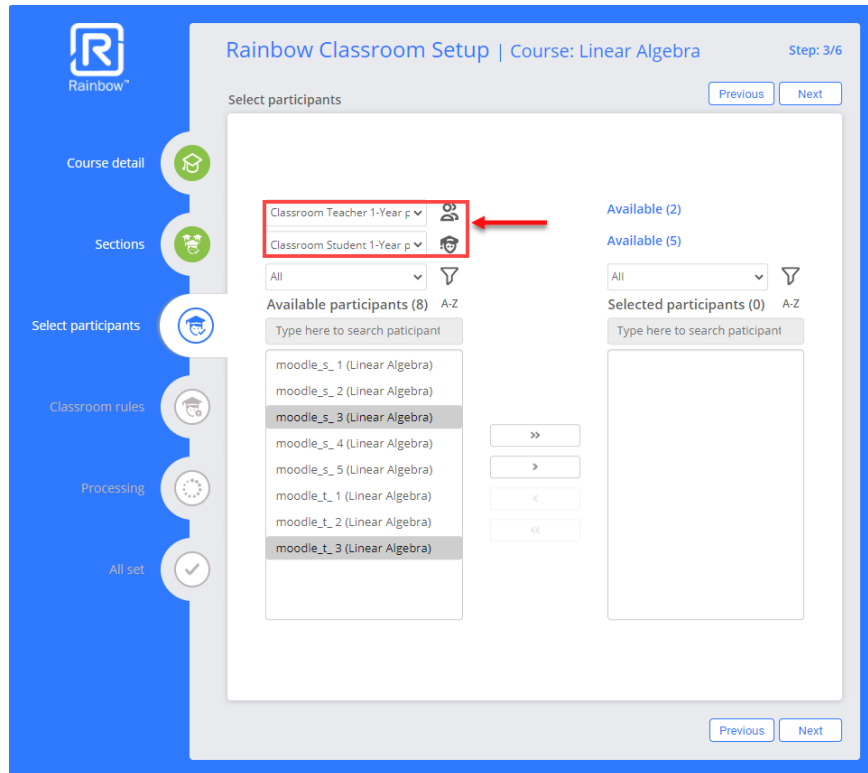


Screenshot- Select Sections

Once done, click **Next**.

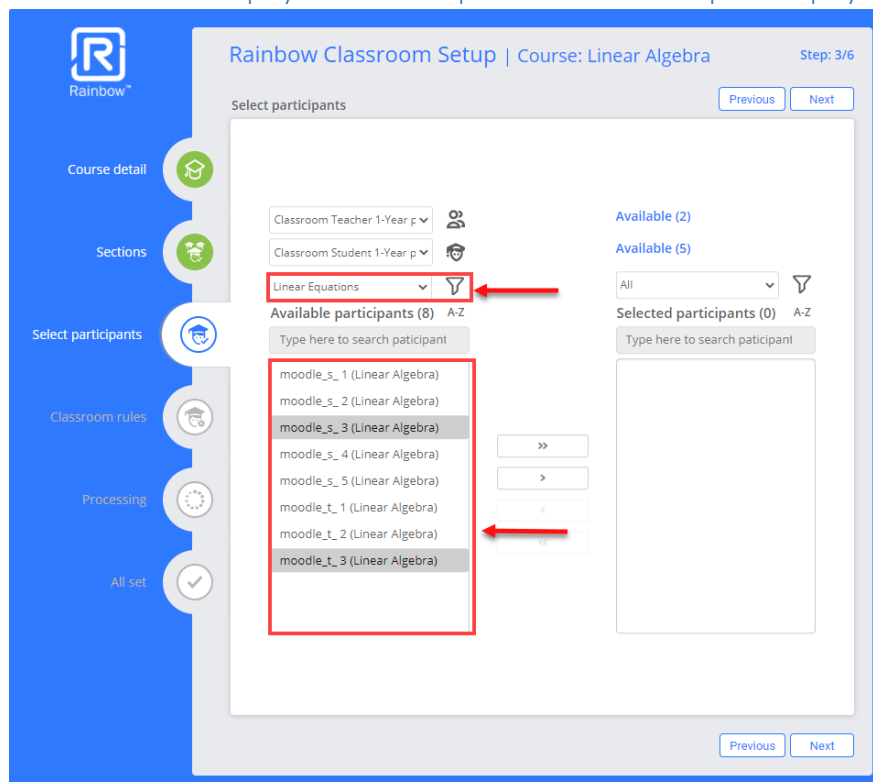
**Note:** For each section, a separate Rainbow Classroom will be automatically created within the course.

- On the **Select participants** screen, select the subscription plan of teachers and students from their respective dropdowns, as shown below.



Screenshot- Select Participants

**Note:** You can filter the results of the participants for a specific section. The filter dropdown is available for the 'Available Participants' and 'Selected Participants' boxes. Select a section from the filter dropdown and its results will be displayed in their respective box. An example is displayed below.



Screenshot- Select Participants

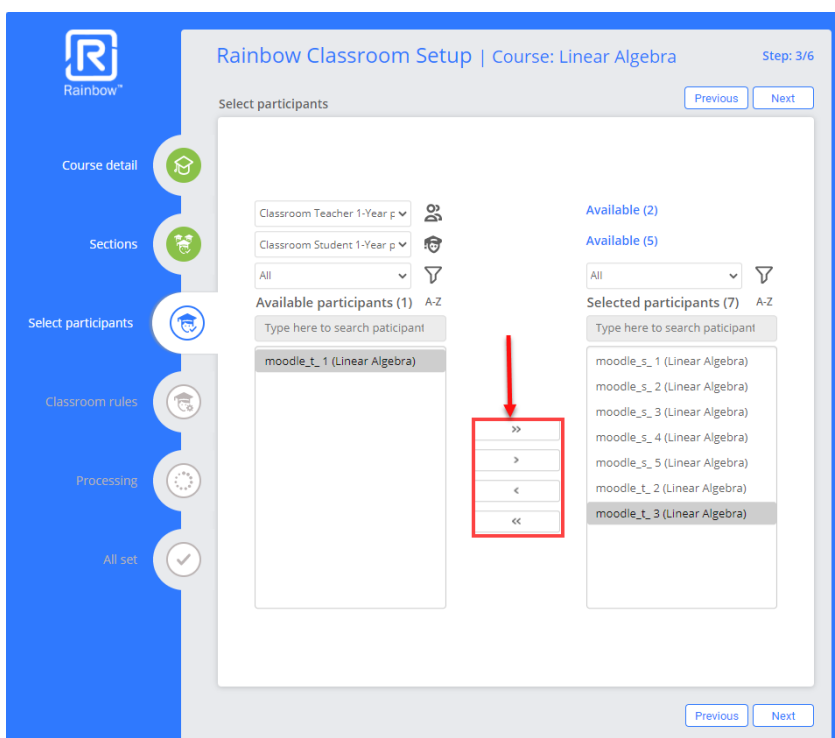


All the available participants are displayed in the box on the left. You can move the participants associated with the section(s) to the box on the right by first selecting the participants and then using the arrow buttons, as shown below.

**Note:** Please note that the available participant's list may include the teachers, students and guests of the respective sections.

**Note:** Selected participants will be automatically added to their respective class associated with the course in Rainbow Classroom.

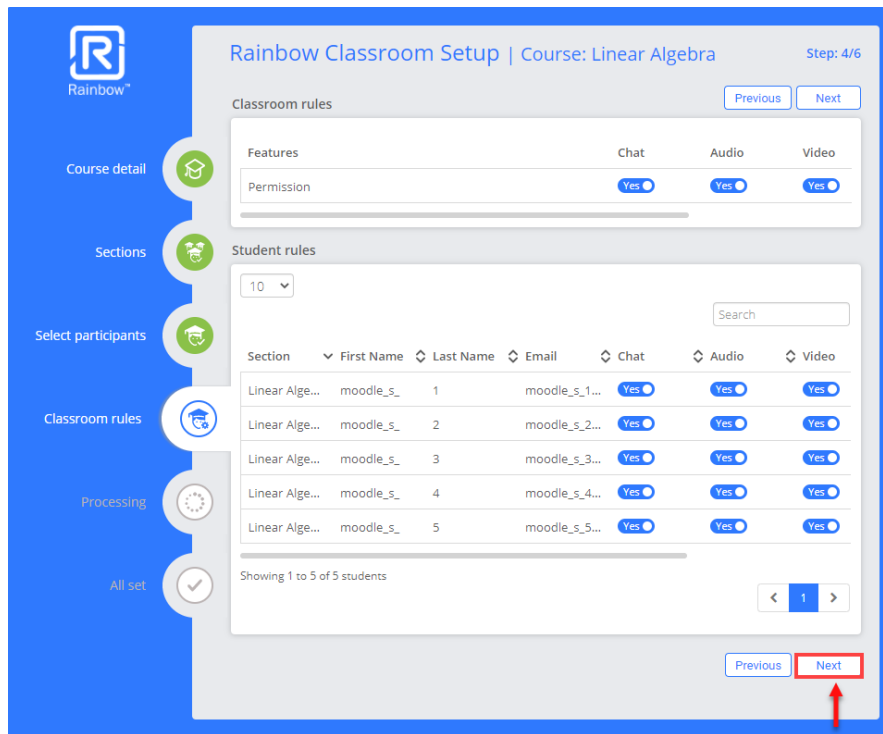
**Note:** At least one participant should be selected in order to provision the course.



Screenshot- Select Students of the Sections

Once done, click **Next**.

3. The next screen will help you set up classroom rules for multiple Rainbow features such as:
  - Chat
  - Audio
  - Video
  - Screen share
  - File Share

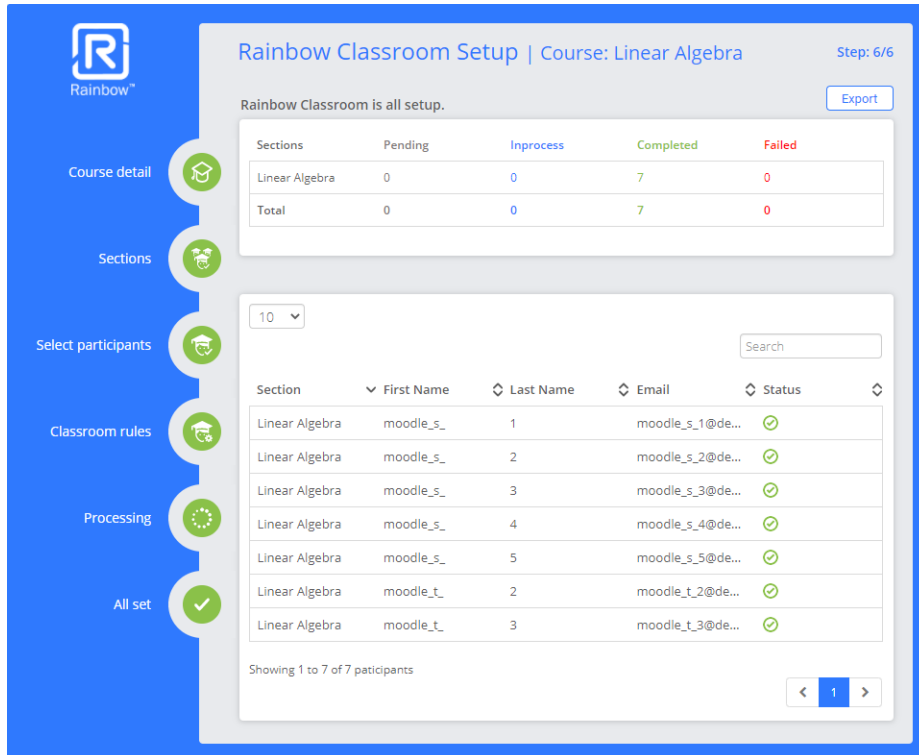


Screenshot- Set Classroom Rules

You can choose to disable/enable a feature for the entire virtual classroom (via **Classroom rules** section) or for each particular student (via **Student rules** section). Click **Next** once you are done setting up classroom rules.

**Note:** It is important to note that the permissions of the above-mentioned features will be disabled by default for any guests available in the classroom. However, the host can allow or decline permissions for the guests from Rainbow Classroom. For more details, please see section titled 'Rainbow Classroom – Host Guide'.

4. Your configurations will be processed and the following screen will be displayed with all the status details regarding sections and associated participants of the sections.



Rainbow Classroom Setup | Course: Linear Algebra Step: 6/6

Rainbow Classroom is all setup. [Export](#)

| Sections       | Pending  | Inprocess | Completed | Failed   |
|----------------|----------|-----------|-----------|----------|
| Linear Algebra | 0        | 0         | 7         | 0        |
| <b>Total</b>   | <b>0</b> | <b>0</b>  | <b>7</b>  | <b>0</b> |

10

Search

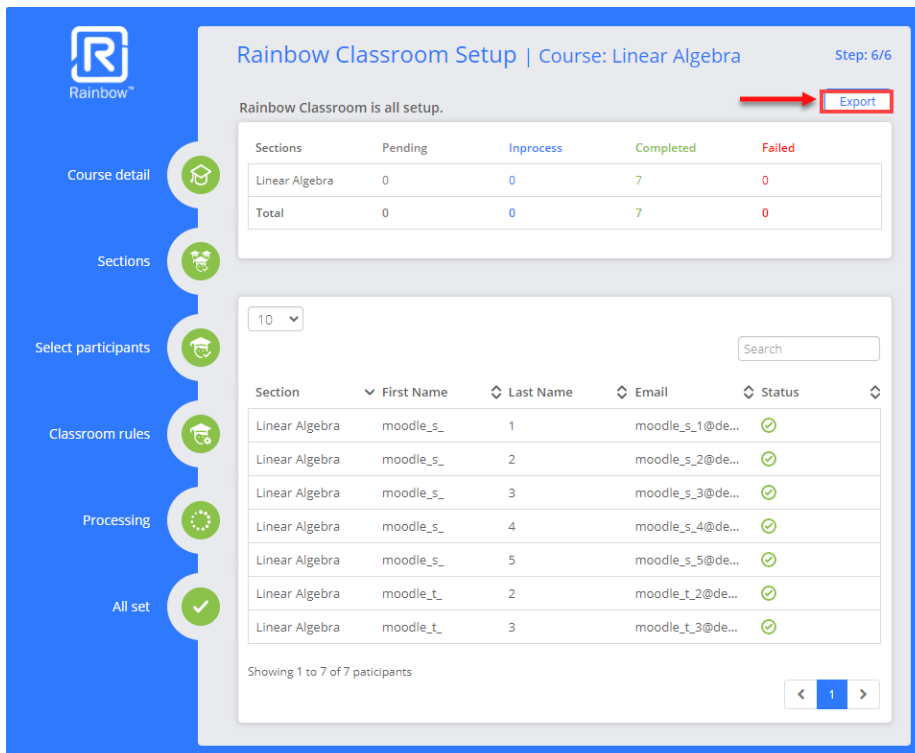
| Section        | First Name | Last Name | Email            | Status |
|----------------|------------|-----------|------------------|--------|
| Linear Algebra | moodle_s_  | 1         | moodle_s_1@de... | ✓      |
| Linear Algebra | moodle_s_  | 2         | moodle_s_2@de... | ✓      |
| Linear Algebra | moodle_s_  | 3         | moodle_s_3@de... | ✓      |
| Linear Algebra | moodle_s_  | 4         | moodle_s_4@de... | ✓      |
| Linear Algebra | moodle_s_  | 5         | moodle_s_5@de... | ✓      |
| Linear Algebra | moodle_t_  | 2         | moodle_t_2@de... | ✓      |
| Linear Algebra | moodle_t_  | 3         | moodle_t_3@de... | ✓      |

Showing 1 to 7 of 7 participants

Screenshot- Processing Screen

**Note:** Pending status implies that this section is in queue and waiting to be processed. In process status implies that your configurations are being applied on the sections. Failed status implies that your intended configurations could not be implemented on the sections due to some issue.

**Note:** You can also export the above status details in an excel file by clicking on the **Export** button displayed at the top-right of the screen, as shown below.



Rainbow Classroom Setup | Course: Linear Algebra Step: 6/6

Rainbow Classroom is all setup. [Export](#)

| Sections       | Pending  | Inprocess | Completed | Failed   |
|----------------|----------|-----------|-----------|----------|
| Linear Algebra | 0        | 0         | 7         | 0        |
| <b>Total</b>   | <b>0</b> | <b>0</b>  | <b>7</b>  | <b>0</b> |

10

Search

| Section        | First Name | Last Name | Email            | Status |
|----------------|------------|-----------|------------------|--------|
| Linear Algebra | moodle_s_  | 1         | moodle_s_1@de... | ✓      |
| Linear Algebra | moodle_s_  | 2         | moodle_s_2@de... | ✓      |
| Linear Algebra | moodle_s_  | 3         | moodle_s_3@de... | ✓      |
| Linear Algebra | moodle_s_  | 4         | moodle_s_4@de... | ✓      |
| Linear Algebra | moodle_s_  | 5         | moodle_s_5@de... | ✓      |
| Linear Algebra | moodle_t_  | 2         | moodle_t_2@de... | ✓      |
| Linear Algebra | moodle_t_  | 3         | moodle_t_3@de... | ✓      |

Showing 1 to 7 of 7 participants

Screenshot- Processing Screen

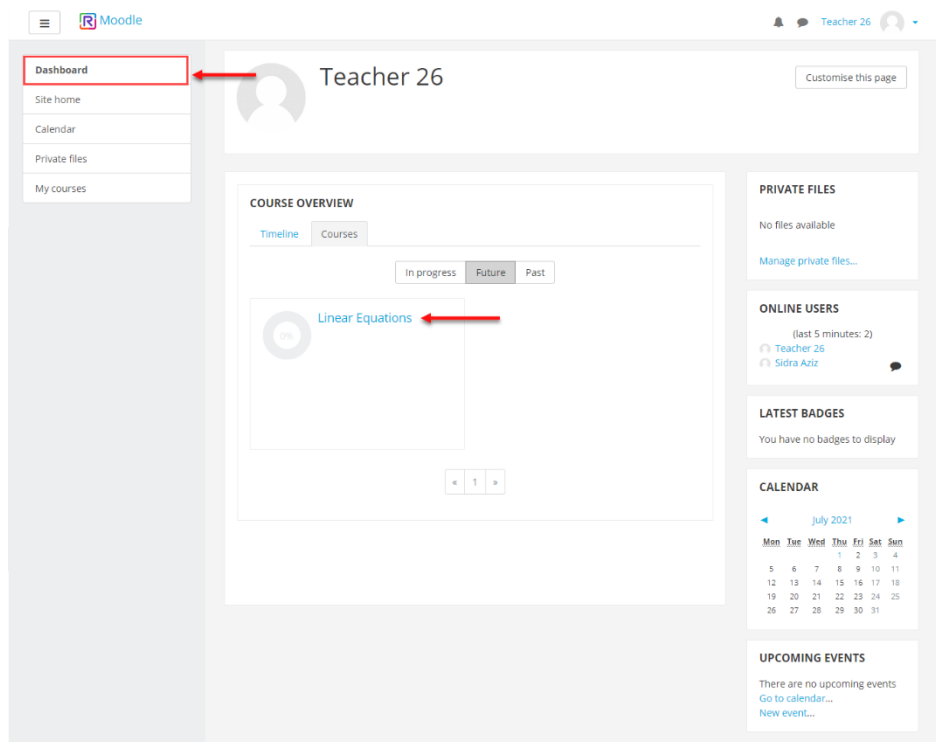
Once the configuration are successfully implemented, a classroom is created for teacher, students and guests to login to.

## 6.2 Start Rainbow Classroom from Moodle (As a Teacher, Student or Guest)

A teacher, student or guest can start or join a classroom session via a single sign-on link for a Moodle course that allows them to jump directly to Rainbow Classroom. It also enables them to open classroom session within Moodle without having to provide user credentials to Rainbow Classroom separately. Once a teacher / student or guest redirects to Rainbow Classroom, they can start or join an audio/video live classroom session for a course.

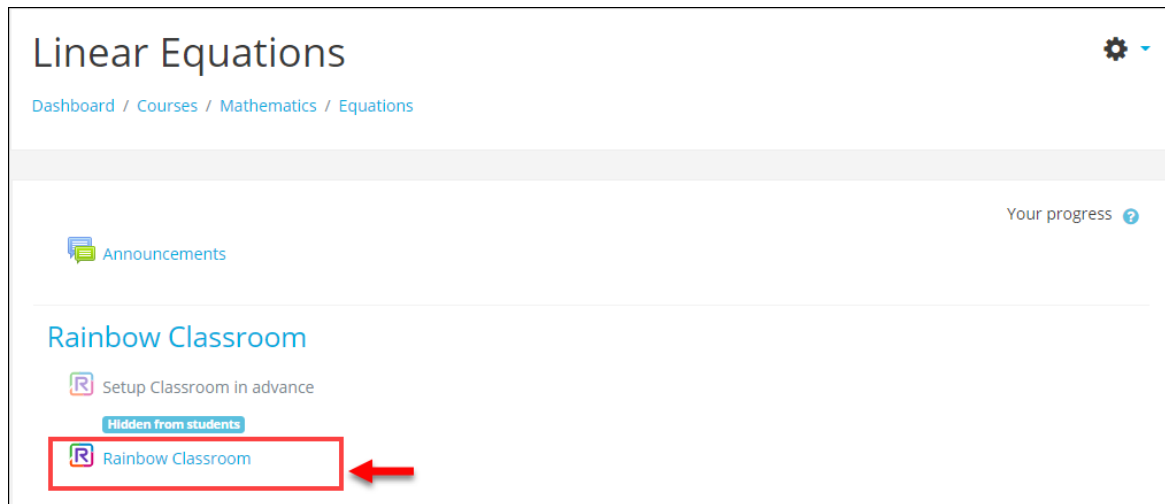
The following are the steps to start/join a classroom session for your Moodle course:

1. Login to your Moodle account as a teacher/student or guest. Click on the **Dashboard** tab, go to the any of the available course, as shown below.



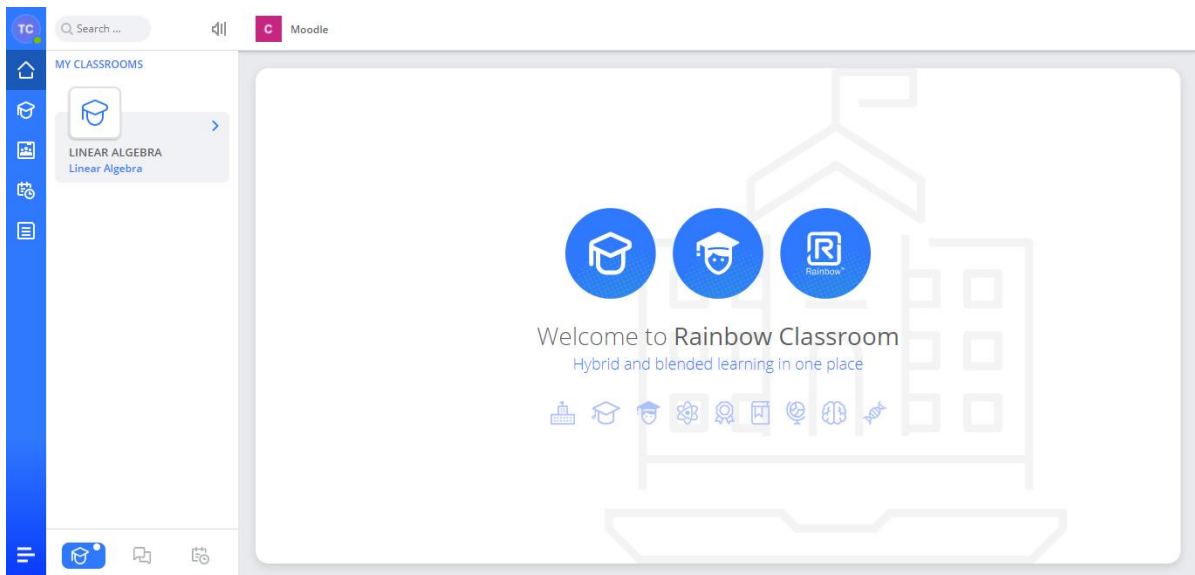
Screenshot- Dashboard screen of teacher/student account

2. On the next screen, click on the **Rainbow Classroom** link and you will be redirected to Rainbow Classroom.



Screenshot- Course

Following screen of Rainbow Classroom will be displayed.



Screenshot- Home Screen of Rainbow Classroom

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