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OIR Open innovative resources for distance learning



TRAINING PROGRAMME

Topical area I: Increasing competencies connected with the use of information and communications technologies in distance learning

Module I.

Methods: Description, presentation, practical exercises

Topics: Platforms for distance work and learning

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1. INFORMATION ABOUT THE TRAINING

1.1. The title of the training

Platforms for distance work and learning – Moodle Platform

1.2. Training needs analysis

Nowadays, information and communications technologies play a more and more important role in education. Distance learning, classes conducted with the use of methods and techniques of distance learning, are commonly implemented at every educational level. Thus, the access and the ability to use the IT infrastructure and software (e.g. e-learning platforms) that allow synchronous and asynchronous interaction between pupils/students and teachers/instructors conducting online classes become a vital issue.

1.3. Learning objectives

Main objective

The main objective is to equip training participants with knowledge about educational tools and features of the Moodle e-learning platform. Moreover, participants shall develop the ability to create their own courses on the aforementioned platform. Furthermore, training participants shall be able to design and conduct their own classes in the form of distance or blended learning.

Detailed objectives

Training participants shall:

in terms of knowledge:

- know the features of a virtual learning environment;
- know terms connected with e-learning;
- know how to use the Moodle Learning Platform, and know the possibilities connected with its use;



in terms of skills:

- be able to create online courses add selected resources and activities;
- be able to design multimedia didactic materials (resources, exercises) used in online courses;
- be able to effectively use the tools available on the learning platform to implement the learning process in the form of distance learning;
- be able to manage their course on the platform;

in terms of attitudes:

 be aware of the opportunities resulting from the influence of information and communications technologies (ICT) on contemporary society and the role of ICT in education.

1.4. The target group of the training

The training is intended for academic teachers, primary and secondary school teachers, and students who want to prepare for conducting classes with the use of methods and techniques of distance learning. The target group of the training are people who want to gain knowledge and develop their skills in terms of conducting classes in the virtual learning environment – on the Moodle Learning Platform.

1.5. Form of training implementation

It is recommended to conduct the training for a group of 15 participants.

Participants should have access to the Moodle Learning Platform (previously installed in a commonly-accessible www server). They should have access at least to the role of the "Course author".

If there is no access to the Moodle Platform, participants may individually use the <u>MoodleCloud</u> service (it allows access to one's own platform with admin permissions). The training may be implemented in the form of distance learning. Thanks to the detailed instructions, exercises, and teaching hints concerning the efficient use of the tools offered by the learning platform in the process of distance learning, the materials may be also used for self-education.



1.6. Duration time of the training

The training is intended for 4 hours and 30 minutes.



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2. TRAINING PROGRAMME

2.1. Learning contents

During the training, the instructor shall present learning materials and ideas foe practical exercises that can be performed on the Moodle Learning Platform.

2.2. Training schedule

Topics	Duration time
Part 1.	
Virtual learning environment	1.5 h
Moodle Platform – key information	1.5 11
MoodleCloud	
Part 2.	
Logging in, account personalisation, the user's profile	
Creating one's own area/course	1.5 h
Editing a course – adding and sharing elements of the course	1.511
Resources – sharing and creating didactic materials	
Activities – sharing and creating interactive elements of the course	
Part 3.	
Managing the course:	
course settings, sharing the course, access permission in the course,	1.5 h
evaluation on the platform, managing the course and its elements, the system	
of reports	



2.3. Didactic means and materials

Means and materials used:

- computer with the Internet access
- Moodle Learning Platform / an account in the <u>MoodleCloud</u> service
- didactic materials (descriptions and presentations)
- practical exercises

2.4. Employed methods

- practical exercises
- descriprion and presentation

2.5. Recommended sources and Internet sources

- Brzózka P., Moodle dla nauczycieli i trenerów, Wydawnictw Helion 2011;
- Büchner A., Moodle 3 Administration, Packt Publishing 2016
- Büchner A., Corporate Learning with Moodle Workplace, Packt Publishing 2020
- Clarke A., E-learning: nauka na odległość, Wydawnictwa Komunikacji i Łączności, Warszawa 2007
- Cole J., Foster H., Using Moodle, O'Reilly Media 2008
- Hyla M., Przewodnik po e-learningu, Kraków 2009
- Plebańska M., Kula I., E-learning: treści, narzędzia, praktyka, ALMAMER Szkoła Wyższa, Warszawa 2011
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- Rice W., Moodle E-Learning Course Development, Packt Publishing 2015
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- Smyrnowa-Trubulska E. Stach S., Burnus A., Szczurek A, Wykorzystanie LCMS Moodle, jako systemu wspomagania nauczania na odległość, Uniwersytet Śląski, Katowice 2012



- Susfał M., Moodle ćwiczenia praktyczne, Wydawnictw Helion 2013
- Wrycza, S., Informatyka ekonomiczna: podręcznik akademicki, Polskie Wydawnictwo Ekonomiczne, Warszawa 2010
- http://Moodle.org/ [accessed: 16.11.2021]
- <u>http://informatyka.wroc.pl/kursy/course/view.php?id=4#section-1</u> [accessed: 16.11.2021]
- http://poznajMoodle.pl/ [accessed: 16.11.2021]
- <u>https://www.slideshare.net/LozaBiznesu/metodyka-webinarw</u> (Metodyka Webinarów) [accessed: 16.11.2021]



3. COURSE OF TRAINING

3.1. Part 1

Detailed objectives:

Participants:

- are able to define a virtual learning environment;
- know the basic features of the Moodle Learning Platform
- know basic terms connected with the platform
- have an account in the MoodleCloud service
- know how to personalize access to the platform and what kind of information is available in the participant's profile

Didactic methods:

- presentation
- explanation
- practical exercises

Duration time: 1.5 h

Didactic means and materials:

computer with the Internet connection, access to the Moodle Platform, an account and access to MoodleCloud service, didactic materials (1-3)

Course of training:

- 1. The instructor greets participants and gives the subject of the training.
- 2. "Ice-breaker" questions (ideas):
 - Have you ever participated in any online training?
 - Have you ever conducted a class/training online?
 - Do you know any platforms for online work or cooperation?



- The instructor presents the features of the virtual learning environment the Moodle Learning Platform (didactic materials 1).
- 4. The instructor presents the MoodleCloud service (didactic materials 2).
- 5. Participants perform task no. 1.

Task no. 1.

In order to learn the possibilities and features of the <u>MoodleCloud</u> service, participants create their own accounts (by choosing the "<u>*Try MoodleCloud for free*</u>" option). During the registration process, everyone needs to create the name of their own platform (name.moodlecloud.com).

After completing the registration process, participants log into their platforms in MoodleCloud and browse through the features of the website.

- 6. The instructor presents how to log into the platform and what information can be found in the user's profile (didactic materials 3).
- 7. Participants log into their accounts on the Moodle platform (MoodleCloud) and analyse the information in the user's account.
- The instructor encourages participants to exchange their thoughts and ideas about Moodle platform.



3.2. Part 2

Detailed objectives:

Participants:

- are able to create their own area/course
- know how to edit the course
- can add and share elements of the course
- know the types of materials on the platform and their features
- can create and share didactic materials for the course
- know the types of activities available on the platform and their features
- can create and share interactive elements of the course

Didactic methods:

- presentation
- explanation
- practical exercises

Duration time: 1.5 h

Didactic means and materials:

computer with the Internet connection, access to the Moodle Platform, an account and access to MoodleCloud service, didactic materials (3-8)

Course of training:

- 1. The instructor explains and presents how to create a course on the platform (didactic materials 4).
- 2. Participants perform task no. 2 they fill in the course form.



Task no. 2.

After logging in to a platform that allows creating one's own courses (<u>MoodleCloud)</u>, participants create a course (using the option "Add a new course") with the following parameters:

- The name of the course includes two elements: title_name&surname of the participants (teacher)
- The course is visible on the list of available courses on the home page
- The course has a short description of its contents and an illustration of the creator's choice
- The course is structured according to the subject
- The students who take part in the course can see their credits, but they cannot see the activity reports
- Participants of the course will not be divided into groups
- The remaining options can be set according to the creator's choice
- 3. The instructor presents the home page of the course (didactic materials 5).
- 4. The instructor explains how to edit the course how to add and share the elements of the course (didactic materials 6).
- 5. Participants perform task no. 3.

Task no. 3.

Participants edit their courses in the following way:

- In the first box, they put the title of the course and the name of its author/instructor. These pieces of information can be edited according to one's will.
- They should add an illustration/a picture that matches the subject of the course.
- The course should have the following sections (side panels):

left side: Logged in user, Online users, Activities, Admin bookmarks

right side: Private files, Calendar

- In the central part they should enter the titles of the following sections: General, Communication, Module 1: title, Module 2: title (the number of modules according to the information specified in the course settings), Additional materials
- The names of the modules should be unified



- Participants should hide all the subjects but for General, Communication, and Module 1.
- 6. The instructor explains how to add and share learning materials in the courses, i.e. resources (didactic materials 7).
- 7. Participants perform task no. 4.

Task no. 4.

In the "General" section of their own course, participants:

- create a page named "Course description" with information about the course (using the option Add an activity or resource -> Page)
- add an external file named "About the author" (using the option Add an activity or resource -> File)
- 8. The instructor explains how to share and create interactive elements in the course (didactic materials 8).
- 9. Participants perform task no. 5.

Task no. 5.

Participants design a course credit in Module 1. The course credit should be prepared in two stages.

Stage 1: Creating questions for the course credit on the platform

- Participants use the option *Course administration -> Question bank -> questions* to add new questions to the course credit.
- Participants create two questions of each type: multiple choice with one answer only, multiple choice with multiple answers allowed, true/false, matching, and numerical.
- Questions should be put in catalogues named Catalogue 1 and Catalogue 2 respectively. Each catalogue should include the same number of questions.
- Participants choose the option "Show question text in the question list" to make the questions visible in the list.

Stage 2: Adding and editing a Quiz in the course:

- Participants add the course credit in Module 1 (using the option Add an activity or resource -> Quiz)
- The test should include the following elements:
 - ✓ the name: "course credit"
 - ✓ description with a short introduction to the credit
 - ✓ the credit should be available due 30 September 2022



- \checkmark the test can be taken twice
- ✓ duration time of the test is 10 minutes
- \checkmark both the questions and the suggested answers in the questions should mix
- ✓ after completing the test, the student can see his/her results
 - ✓ after completing the test, the student can see the "General feedback"
 For instance:

The grade	Feedback
100% - 60%	Congratulations! You have passed!
59,99%-0%	Not enough correct answers. Take the test once more.

The test should include six questions in total, i.e. 3 questions from Catalogue 1 and 3 RANDOMLY chosen questions from Catalogue 2.

10. Participants conclude the activities they have prepared at this stage of designing their own course.



3.3. Part 3

Detailed objectives:

Participants:

- know how to manage their course
- can change the settings of their course
- can administer the accessibility of their course to the platform users
- are able to find the necessary information in the report section of the platform
- know the marking system and the gradebook on the platform
- are aware of and know how to use the administrative options of their course (backup, restore, import, reset).

Didactic methods:

- presentation
- explanation
- practical exercises

Duration time: 1.5 h

Didactic means and materials:

computer with the Internet connection, access to the Moodle Platform, an account and access to MoodleCloud service, didactic materials (9-13)

Course of training:

- 1. The instructor presents how to manage the course on the platform (didactic materials 9).
- 2. Participants check the settings of their course (using the option Course administration)
- 3. The instructor presents the methods of sharing the course (didactic materials 10).
- 4. Participants perform task no. 6.



Task no. 6.

Participants log into the course they have created and change the settings so that students can enrol on the course on their own.

Access to the course should be limited – the password is required to join the course. The inactive students should be expelled from the course after one month (use the option *Course administration -> Users -> Enrollment methods -> Self enrollment (Student)*)

Participants should add their own accounts to the created course with instructor and student roles (using the option *Course administration -> Users -> Enrollment methods -> Manual enrollment*)

- 5. The instructor explains how to access the report module on the platform (didactic materials 11).
- 6. Participants perform task no. 7.

Task no. 7.

Participants log into the platform and check the activity in their course from the moment it was created taking into consideration all the elements of the course (*Course administration -> Reports -> Logs*)

- 7. The instructor describes the marking system and the gradebook on the platform (didactic materials 12).
- 8. Participants perform task no. 8.

Task no. 8.

Participants log into the course that they have created once more, open the *Grades* tab and check if the "Course credit" is visible in the gradebook (the "Quiz" activity that they have added before). They take the test and observe the changes in the gradebook.

In the created course, participants should:

- Determine the final grade in the course (the option: Grades -> Letters). It should be determined in the following way:
 - i. 100% 75% course passed



- ii. 64,99% 0% course failed
- Determine that the name of the final grade in the course is: Letters. To do this, they go to *Gradebook setup -> Setup -> Gradebook setup* and choose the option "Edit settings" and in "Grade display type" choose "Letters".
- 9. The instructor describes additional features of the platform: backup, restore, import, reset (didactic materials 13).
- 10. Participant perform task no. 9.

Task no. 9.

Participants use the option "Backup" to create a backup copy of their course. It should include all elements of the course, i.e. didactic materials (resources), activities, and accounts of the participants of the course.

Participants save the backup copy on the hard drive of their computer.

Participants use the option "Restore" (if they are in their course) or "Restore course" (if they are in the administration panel of the platform) and create the second course using the backup copy that they saved before.

11. The instructor encourages participants to share their opinions about the virtual environment for distance learning that they have learned during the course.



4. DIDACTIC MATERIALS

4.1. Didactic materials – 1

Virtual learning environment

The virtual learning environment (VEL) is a system that supports the administration, organisation, and conducting of e-learning classes with the use of tools for online communication and for creating educational materials.

To use an e-learning platform you need:

- computer (and basic knowledge about using it)
- Internet browser (you can use the e-learning platform in any browser of your choice)
- the Internet access
- email account
- account on the platform.

Moodle platform

The Moodle platform is an LCMS (Learning Content Management System) class system that enables content (teaching materials) management. It is also an LMS (Learning Management System) class system, i.e. it enables the management of participants in the remote learning process.

The creator of the Moodle platform is <u>Martin Dougimas</u> – an Australian teacher and IT specialist. The platform name is an acronym for Modular Object-Oriented Dynamic Learning Environment. The first version of the platform was made available in 2002 and since then Moodle has been a popular online learning system both in <u>Poland</u> and around the <u>world</u> (<u>https://stats.Moodle.org/</u>).



4.2. Didactic materials – 2

anoodlecloud 📶

The <u>MoodleCloud</u> service gives you access to your own e-learning platform hosted on external servers. It is an ideal solution for the first testing of the Moodle e-learning system without the need to have IT facilities and install the platform on your own. On the MoodleCloud website, you get access to your "own" platform, the address of which will have the moodlecloud.com domain. Currently, you can use the "*Try MoodleClud for free*" option giving you access to the website and courses created on it for 45 days. You need to use the option "Create a new account" in the system and provide your e-mail address and the name of your own platform in the moodlecloud.com domain. Then, you get an account on the website with platform administrator rights.



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4.3. Didactic materials – 3

Logging in, personalisation of access, the user's profile

The Moodle platform allows personalisation of access for each user, which means that students, pupils, teachers, and other people working on the platform will have their own login (username) and password.

After logging in to the platform (i.e. authentication and authorization of the user consisting in providing the login and password to enter the IT system), the activity of a given user is registered and the access permissions are individualised depending on the function that the user performs on the course and the areas to which he/she has been assigned.



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4.4. Didactic materials – 4

Creating a course on the platform

Courses (new areas) on the platform can be created by users who have the permissions (role) of at least the "Course author" in the system. These permissions can only be granted by the platform administrator.

Courses on the platform can be organised (grouped) within categories that organise the structure of the platform. The categories may be, for example, names of faculties, names of classes, names of teachers conducting classes, or names of fields of study. Creating categories and subcategories is very helpful if the platform is used by a large number of users. The category structure on the home page of the platform is most often designed by the system administrator.

To set up a new course, select the category in which you want to place the course and choose the "Add a new course" option (a course can be placed in only one category). Then you need to define the individual course settings (parameters determining the appearance of the course and its features) in the course form.



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4.5. Didactic materials – 5

Course home page (course interface)

Each area (course) consists of the main panel – the central place in the course, which displays the structure of the entire course divided into a certain number of sections

(topics/lessons/modules). The first section (section "0") should usually contain basic information about the course, syllabus, reading list, and general information related to the course.

The following sections contain materials for specific activities/topics. This is where you can add teaching materials (resources) and various tools available on the platform, e.g. communication tools, tasks, and quizzes (activities). This is where the actual work of the class takes place. It is an informational and educational space. You can call it a "virtual classroom" for conducting online classes.

NAME OF THE PLATFORM		
BLOCK <calendar></calendar>	General information/introduction	
BLOCK <online users=""></online>	Topic 1 Activities and resources in topic 1	
	Topic 2 Activities and resources in topic 2	

Figure 1. The general layout of the course in the Moodle platform



4.6. Didactic materials – 6

Course edition, i.e. adding and sharing elements of the course

Adding individual elements to the course is possible in editing mode. This mode allows authorized users (administrator, teacher, course author) to manage the course content. Switching to editing mode (button in the upper right corner of the screen: "Turn editing on", an option from the "Administration" block) changes the view. The tools (icons/drop-down lists) allowing for various operations on these elements appear next to the given elements of the course. These tools are platform-wide and apply to course sections, blocks, activities, and course resources.

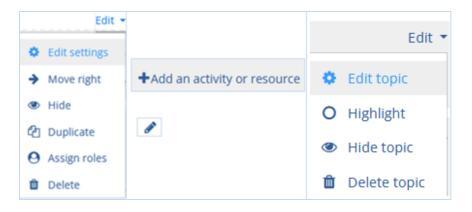


Figure 2. Tools (icons/drop-down lists) appearing in the course after switching to the edit mode

Creating a course on the platform consists in adding (only possible in the active editing mode) elements of the course. To do so, you need to select the appropriate element (available on the platform) after selecting the option: "Add an activity or resource". In the course area on the Moodle platform, it is possible to use two types of elements: resources and activities.



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4.7. Didactic materials – 7

Course resources, i.e. sharing and creating didactic materials

Course resources are objects on the platform that allow you to place and store didactic content (e.g. texts, multimedia files, links to pages or files) in the course space.

Resources on the platform can be:

- edited directly on the course page
- files prepared before (e.g. doc, pdf, ptt) that you upload to the course
- hyperlinks to websites and other resources available on the Internet

You can add resources in editing mode (after pressing the "Turn editing on" button). To do so, you need to select the "Add an activity or resource" option. Each of the introduced resources at the stage of editing has the same sections in the so-called form that include the resource title, summary, and administrative options.

In order to add any type of resource, you need to be logged in to your course, turn editing mode on (1), and select "Add an activity or resource" (2).



Figure 3. Adding a resource to the course

Then you need to select a specific type of resource (3) that will be inserted/shared in the course. Next, you need to follow the instructions that appear in the system.



4.8. Didactic materials – 8

Activities - sharing and creating interactive elements of the course

The second group of elements on the Moodle platform that can be used in courses are the "Activities". These are dynamic, interactive elements of the course, i.e. they may change depending on the action taken by the course participant (e.g. by assessing their responses, adding up the number of votes given for a given option, or transferring to the indicated/selected page in the course). Activities are the most important elements of the course. They can be used for communication between participants of the classes, as well as means of effective transfer and consolidation of knowledge, and its verification.

To add activities (similarly to resources) you need to enable the course editing mode (press the "Turn editing on" button) and select the "Add an activity or resource" option. At the editing stage, each activity has common sections in the form that includes the title of the activity, the summary and administrative options (which may differ significantly depending on the type of activity).

In order to add an activity, you should enter the course, enable the editing mode (1), and select the option "Add an activity or resource" (2).

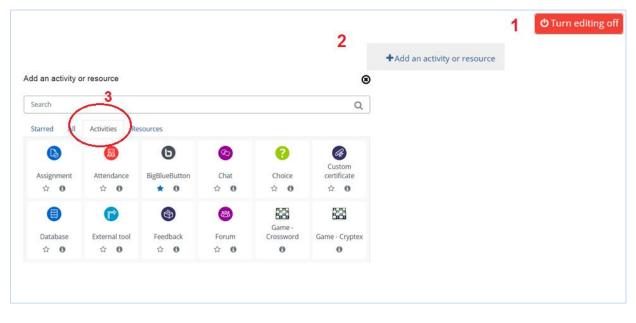


Figure 4. Adding a new activity



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Then, you need to choose the type of activity (3) and follow the instructions that appear in the system.



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4.9. Didactic materials - 9

Course administration

When the course on the platform is ready, the teacher (who can edit the course contents) can use some options that enable him/her to efficiently manage both the information and resources contained in his/her course and the accounts of students/pupils participating in the classes.

You can manage the course through the administration panel (the tab called "Course administration"). You can access it from the main page of the course. In this tab, there are over a dozen options that allow you to properly manage the course content, make appropriate changes at any time, or check the progress of participants.

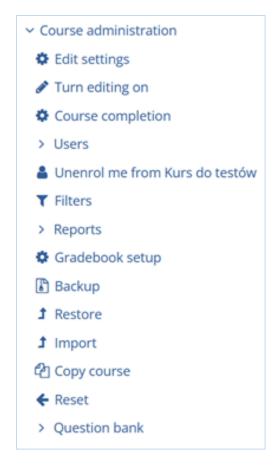


Figure 5. Options in the "Course administration"



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4.10. Didactic materials – 10

Course administration – Users

A particularly important option in the administration panel is "Users". It allows you to take appropriate steps to enable students to enrol in your class, i.e. the course. In order to share the course content, go to "Course administration" > "Users"> "Enrollment methods".

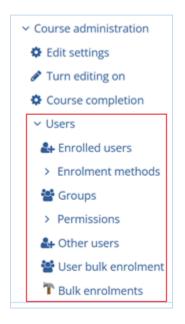


Figure 6. Course administration – Users

In this section, you can choose one of three enrolment options: "Manual enrolments", "Guest access", and "Self enrolment (Student)".



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4.11. Didactic materials - 11

Reports

There is a reporting system available on the platform. Reports show participants' activity in the course and selected course elements. The comparison of activity from other courses is not possible. Data generated from reports can be downloaded from the platform.

You have access to the following types of reports ("Course administration" > "Reports"):

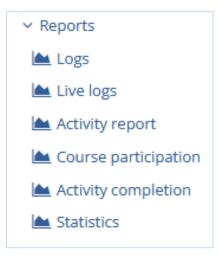


Figure 7. "Reports" section in "Course administration"



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4.12. Didactic materials – 12

Gradebook - the grading system on the platform

Many of the activities designed in the courses on the platform can be assessed. You can evaluate, among others, tasks, tests, or discussions on the forum. By default, you can see all grades issued in activities in the "Grades" or "Gradebook setup" section (in "Course Administration").

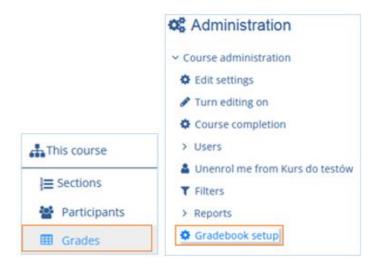


Figure 8. Access to the gradebook - the teacher's perspective



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4.13. Didactic materials – 13

Administration of the course and its elements

There is a set of tools that enable you to manage your entire course and its elements.

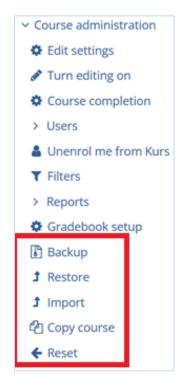


Figure 9. "Course administration" - tolls for course management

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