IMPROVING THE PROFESSIONAL SKILLS IN GREEN CONSTRUCTIONS THROUGH ONLINE TRAINING

Erasmus+ Strategic Partnership KA2

No. 2017-1- LV01-KA202- 035483

O7 - Final Report

MANUAL FOR STUDENTS

TABLE OF CONTENT

INTRODUCTION

E-LEARNING PLATFORM

Green Construction e-learning platform is an e-environment including training materials for learning-teaching activities. The training materials were implemented in the open source Moodle (**M**odular **O**bject-**O**riented **D**ynamic **L**earning **E**nvironment) platform, which enables:

- Structured work with the participants, divided into topics;
- Include all course materials that can be tailored for online activities;
- Facilitate communication and collaboration between mentors from schools and participants (the other participating teachers).

Green Construction Consortium selected Moodle because it supports cooperation and collaborative content creation, and it integrates tools for establishing the elements of constructive pedagogy; it is a so called web2.0 aware platform. Moodle Learning Management System lets the trainers/mentors to create, upload, share digital learning content, graded assignments, quizzes, discussion forums, etc. with an easy to learn user interface.[1]

Green Construction developers put two basic concepts into the centre of the methodology:

- innovation isn't imaginable without teamwork, so the collaboration of teachers is crucial;
- A practice-oriented approach has to apply all over the course.

Collaboration was facilitated by the mentors, and by the practice-oriented assignments ("find out, plan, design, solve, etc.") what could be completed only working together in teams.

In Moodle five different online courses were created:

(1) English version a common basis for developing the national versions
(2) National versions: Bulgarian, Latvian, German, and Hungarian courses

The structure of the national versions is the same; each of them includes the same learning materials, learning guides and other online tools supporting learning/teaching processes.

However, the trainers can add extra learning contents, readings, share video tutorials and other digital supporting materials according to the special need of the group they were responsible for. We discussed in the training of trainer how important to reuse Open Educational Resources now-a-days, so the mentors were encouraged to integrate OERs into the learning materials themselves.

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[1] The innovator of the system is Martin Dougiamas, an Australian educator and computer scientist. His aim was to develop an open source application to support a social constructionist model of teaching and learning within Internet-based communities. Link to the Moodle community: https://moodle.org

The platform is accessible at the link: https://gcpro.rta.lv/

The graphical design of the e-learning platform is aligned with the design of the flyer. On the front page visitors find four course categories according to the topics of the learning material. Under each topic there are five links to the various language versions of the Green Construction courses:

Under the list of the course categories, you see the list of the European organisations, the experts of which developed the learning content.

▷ Materials for green construction (5)

▷ Energy efficiency and green technology (5)

▷ Passive house technology (5)

▷ General courses (3)

▶ Expand all

Contacts	Partners
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ENTERING THE COURSE

At the top of the platform, the visitor can choose a language, and they find the option to enter by clicking **Log In**. After selecting the language, all text, commands, menus of the platform, will be published on this language.
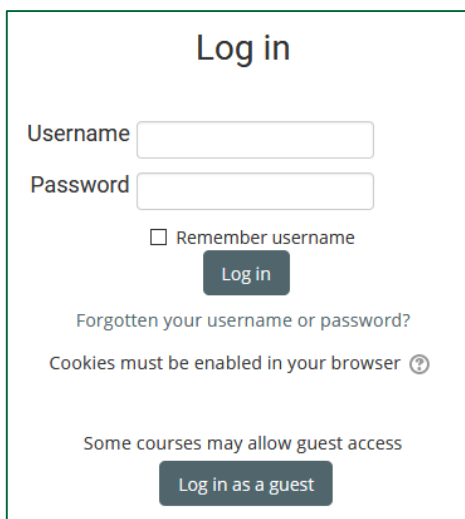
🌐 English (en)   Username   Password   **Log In**

Deutsch (de)

English (en)

Latviešu (lv)

magyar (hu)
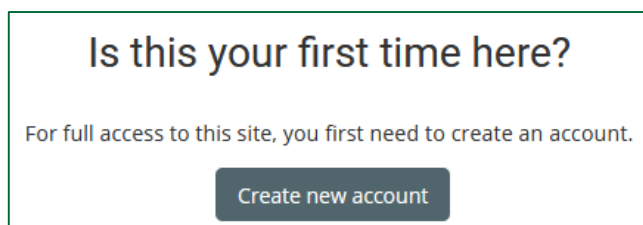
Български (bg)

Green Constructi   ct's E-learning site

ANNOUNCEMENTS   ❚❚

If you click on any course name before logging in, you will be navigated automatically to the LOG IN page.

Log in

Username

Password

☐ Remember username

Log in

Forgotten your username or password?

Cookies must be enabled in your browser ⑦

Some courses may allow guest access

Log in as a guest

The courses are not open for guests; they can be accessed only by registered users.

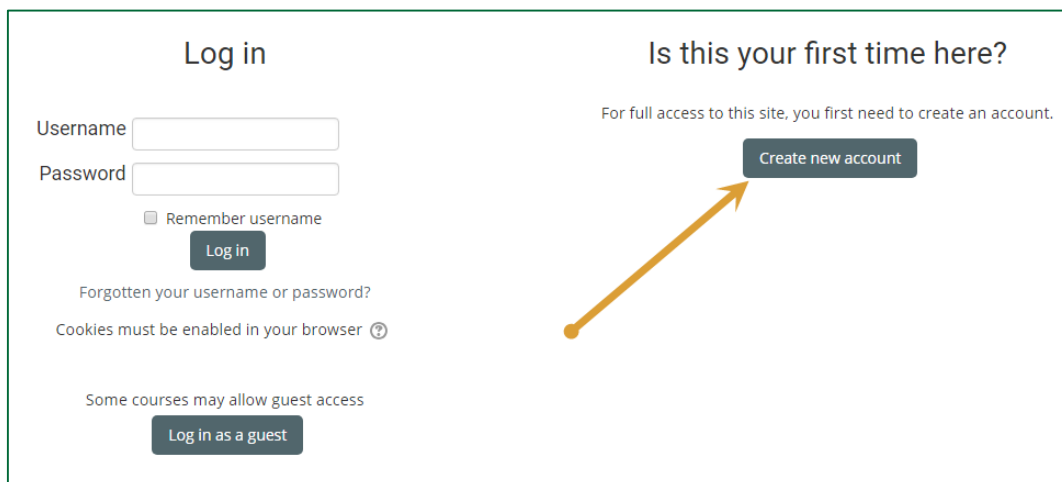If you don't have any account yet, you have to register by clicking the CREATE NEW ACCOUNT button.

Is this your first time here?

For full access to this site, you first need to create an account.

Create new account

REGISTERING ON THE PLATFORM

1. Create a new account by filling in the requested data.

Log in

Username

Password

☐ Remember username

Log in

Forgotten your username or password?

Cookies must be enabled in your browser ⑦

Some courses may allow guest access

Log in as a guest

Is this your first time here?

For full access to this site, you first need to create an account.

Create new account

2. You have to fill in at least the fields marked by red stars, which are compulsory, and then save the figures by clicking **Create new account**.

New account

▼ Collapse all

▼ Choose your username and password

Username *

The password must have at least 8 characters, at least 1 digit(s), at least 1 lower case letter(s), at least 1 upper case letter(s), at least 1 non-alphanumeric character(s) such as as *, -, or #

Password *

▼ More details

Email address *

Email (again) *

First name *

Surname *

City/town

Country   Select a country ▼

Create my new account   Cancel

There are required fields in this form marked * .

An email should have been sent to your address at ▓▓▓▓▓▓▓▓▓▓

It contains easy instructions to complete your registration.

If you continue to have difficulty, contact the site administrator.

3. You will receive a confirmation to the e-mail address you supplied. Click on the link in the e-mail to verify your registration.

Hi ▓▓▓▓▓▓,

A new account has been requested at 'Green Construction Project's E-learning site' using your email address.

To confirm your new account, please go to this web address:

https://gcpro.rta.lv/login/confirm.php?data=lxfI3WATR5atrD8/test

In most mail programs, this should appear as a blue link which you can just click on. If that doesn't work, then cut and paste the address into the address line at the top of your web browser window.

If you need help, please contact the site administrator,

Thanks, ~~Gabor Lajos~~

Your registration has been confirmed

Continue
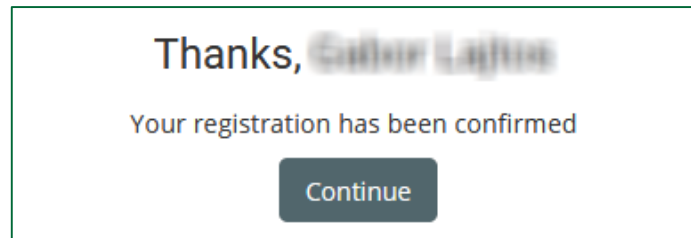
4. To see the learning content, you need to enrol to the course by adding the unique *enrolment key* provided by the platform administrator or by your tutor.


Enrolment options

Materials for green construction (English)

Self enrolment (Student)

Enrolment key
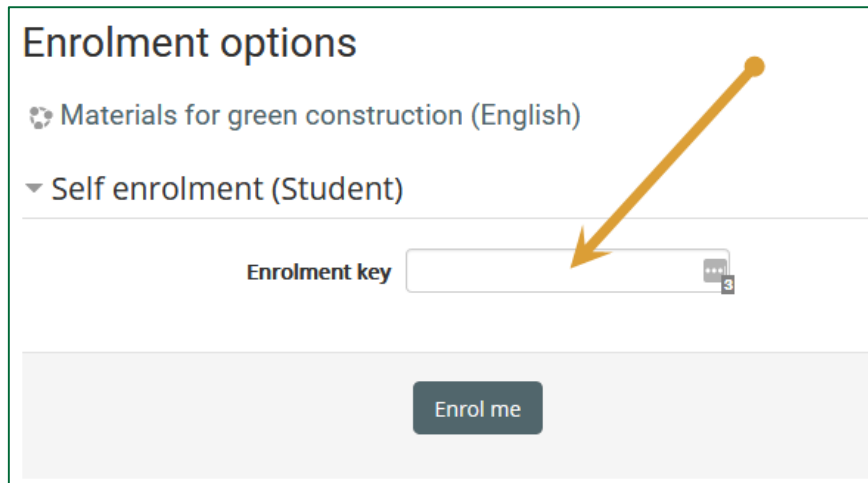
Enrol me

Welcome to Materials for green construction (English)!

If you have not done so already, you should edit your profile page so that we can learn more about you:

https://gcpro.rta.lv/user/view.php?id=33&course=11
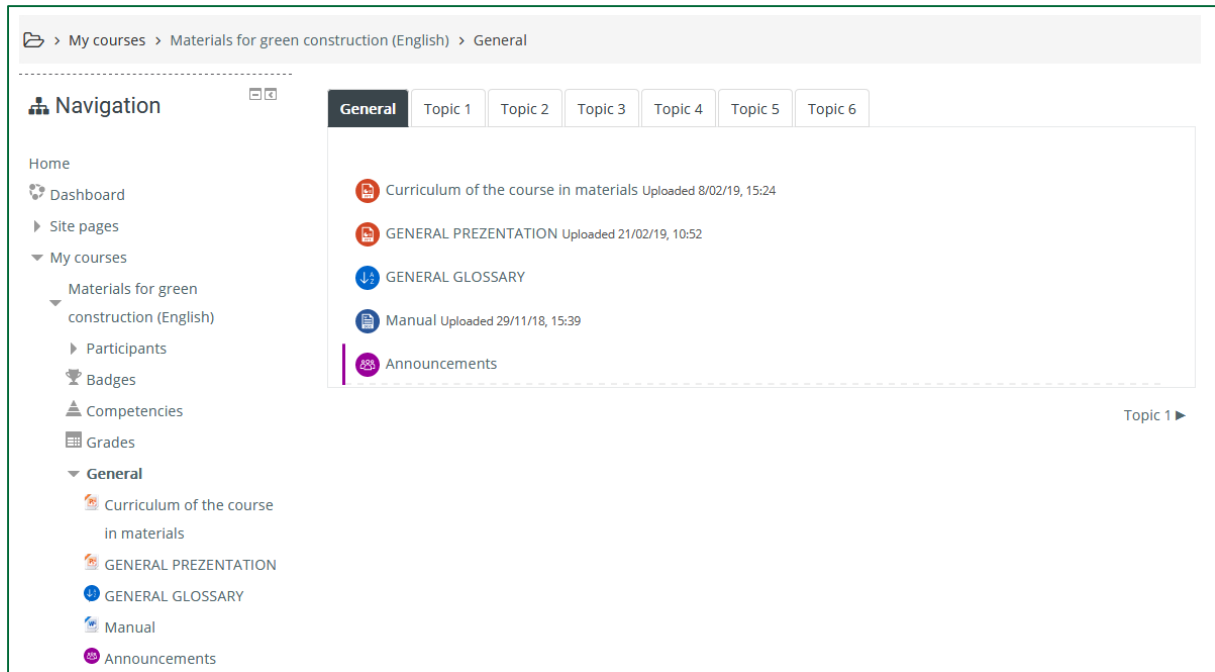
5. Successful enrolment will be confirmed in an e-mail. By clicking on the link in this e-mail, we can provide more information about ourselves in the ⚙ **Edit profile** menu. (You can also edit the profile later in the user menu at the top of the screen.)
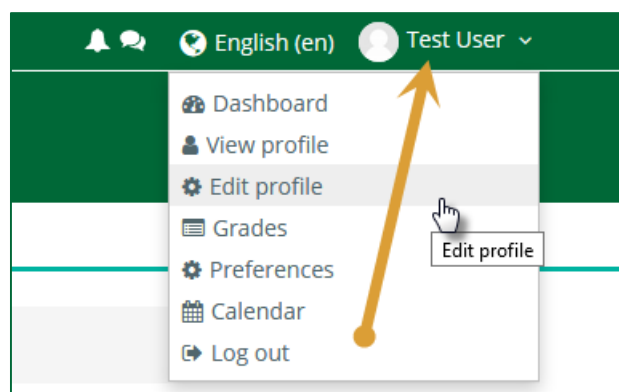
STRUCTURE OF THE COURSE – COURSE COMPONENTS

After entering the course, you will be navigated on the front page of the course, with several course components we will describe in detail.
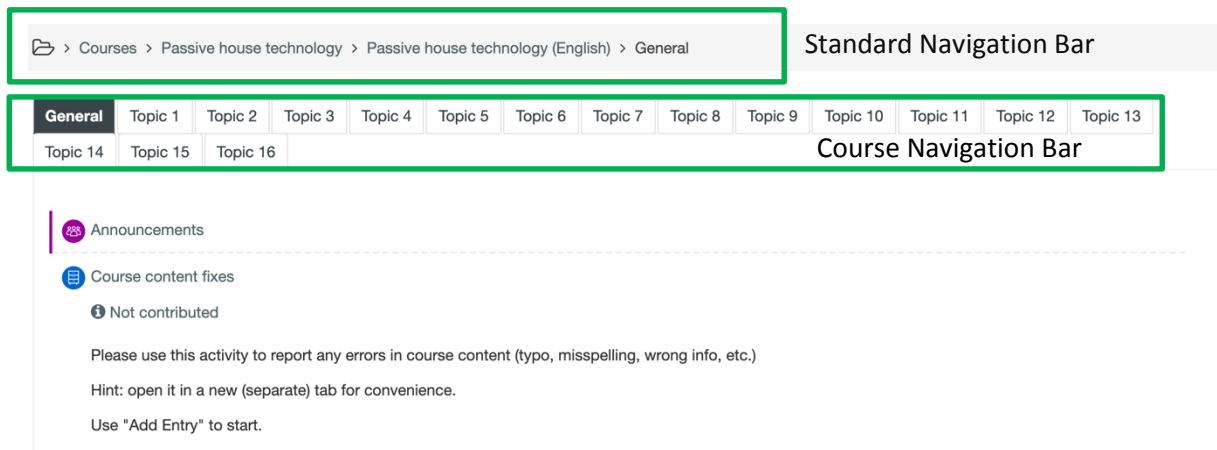

MAIN NAVIGATION BAR

In the upper part of the window you see the main navigation bar, which shows you in which area of the platform are you at present. By clicking one of the words of the bar, you will be navigated to the selected area, e.g. on the front page, if you click the word "Home".

COURSE NAVIGATION BAR

In the middle of the window you will find the learning content, and other components of the course, like discussion forum, assignments, quizzes, etc., however, to access to these components, you have to select one of the modules, by clicking the navigation bar of the course.

After entering the course, you will see a new navigation bar beyond the standard bar showing the path, where you are. The new bar let you move around of the **topics** of the course.

In the course navigation bar, you see the links beginning with "General" and followed by the titles of the modules.

Standard Navigation Bar

Course Navigation Bar

Under the tab **General** you find a forum (**Announcements**) for communicating with others by writing posts, and an option to give notes (**Course content fixes**) to the system administrators if you experience mistakes in the operation of the platform.

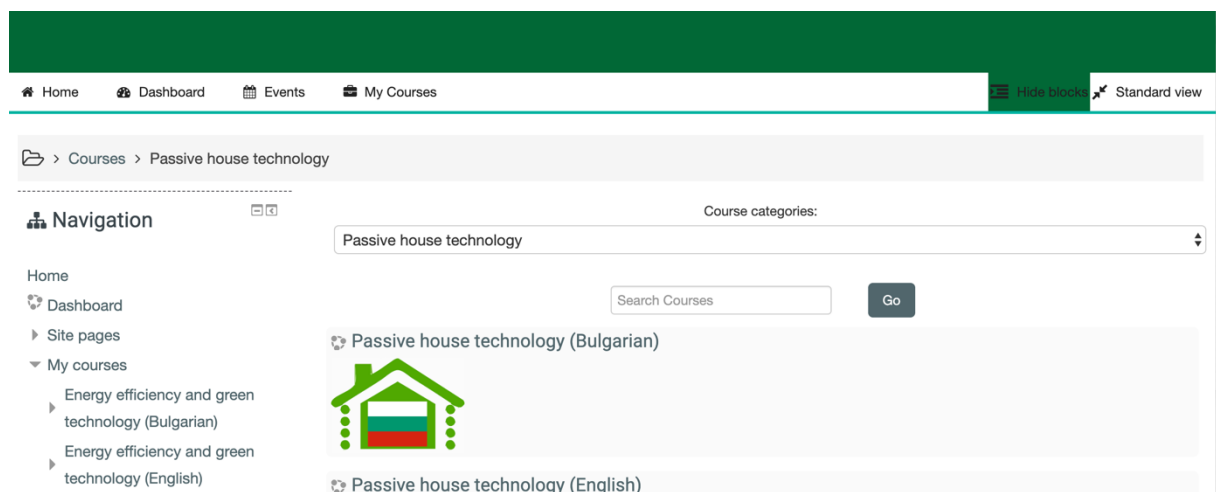## CUSTOMIZING YOUR LEARNING ENVIRONMENT

MAIN MENU

After selecting one of the course categories, you will be navigated to the next site with a list of the language versions of the course and with a menu under the title, with the commands *of:*

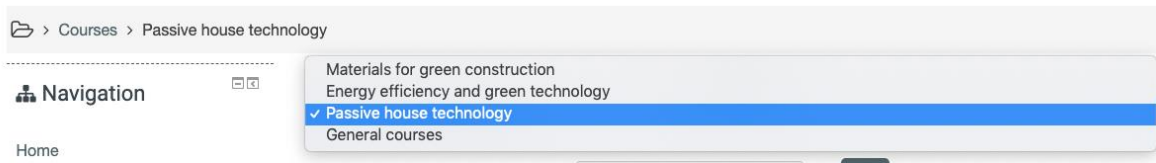**Home, Dashboard, Events and My courses**

At the right side you can change the view by clicking

Hide blocks and **Full screen.**

At the left side of the screen there is a Navigation menu with list of functions, this part is the so-called (◀) BLOCK. Right to it you find a dropdown menu with the categories, and a "search field" to find another course you want to visit.
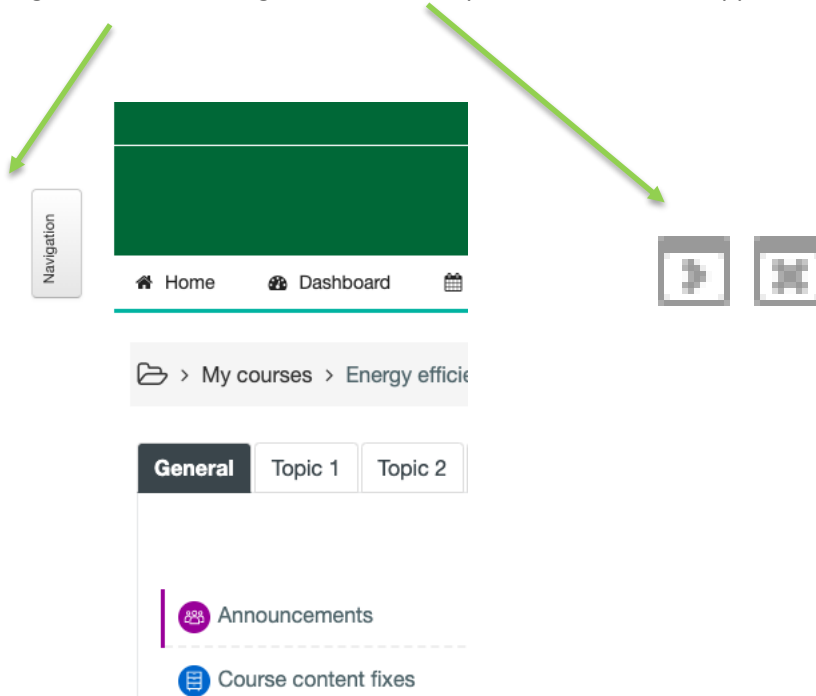

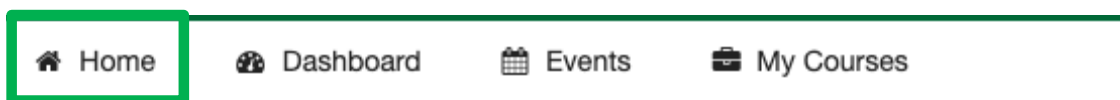If you don't need the options offered by of the BLOCK, you can hide it,

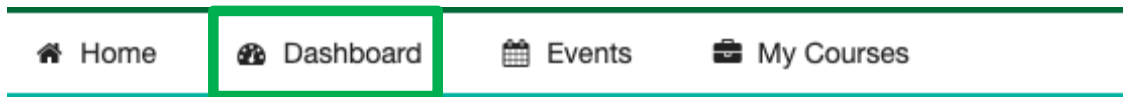(1) By clicking the small icon at the right top of the block

The block can be open again, when you need it, by moving the cursor above the rectangle with the text "Navigation", and clicking the icon, which points now into the opposite direction than before.

Let's try out the menu commands:

🏠 Home

Clicking this command, you will be navigated back to the front page of the platform.

Dashboard

This command displays your special learning environment in the form of table, with all courses you are just enrolled. In the first row you see the courses you recently accessed.

At the left side you see several different blocks like:

- **Timeline** – with the actual events in your courses
- **Private files** – you can upload here your own working materials, documents, etc. with Drag Drop technics.
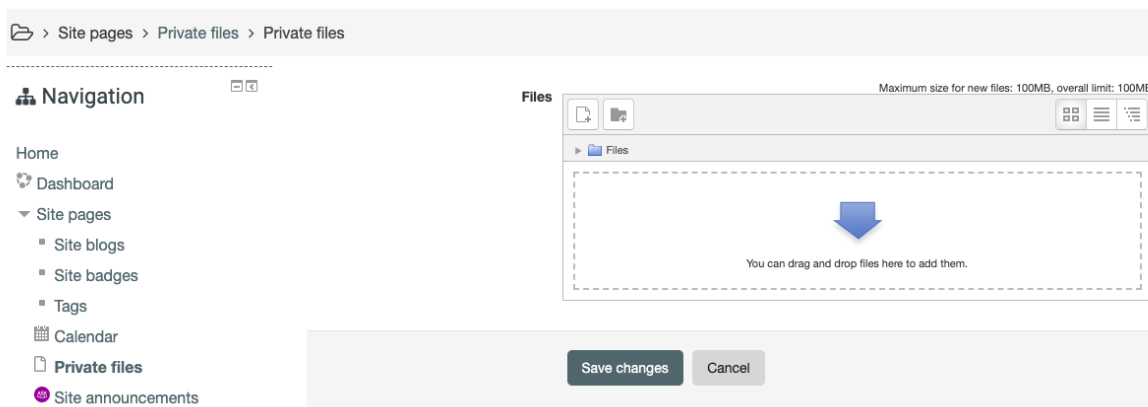
- **Online users** – you can see here the name of other students, trainers who are just present in the platform.
- **Calendar, Upcoming events** – these are managed by the trainers. If the trainer gives a deadline when you have to submit an assignment, you will see here.
- Etc.

You have to know, that the Moodle platform is very flexible, the system administrator can build a customized learning environment for each course, and the trainer and even you as student have also freedom to modify the working environment, e.g. by hiding blocks.

🏠 Home   🎨 Dashboard   📅 Events   💼 My Courses
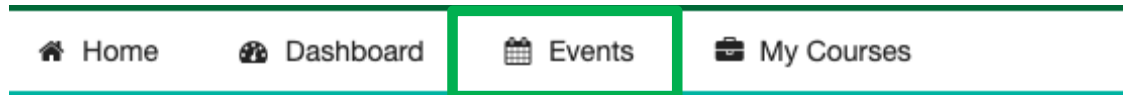
📅 Events

The events are categorized by different aspects, like global events (for everybody who enter the platform), course-events for students enrolled, events for groups, etc. You will see in the calendars only that events, which are belonging to your course, group, etc.

🏠 Home   🧭 Dashboard   📅 Events   💼 My Courses

💼 My Courses

This command gives a list of the courses you have the permission to visit.

On the left side of the menu, you see the options for customizing your learning environment:

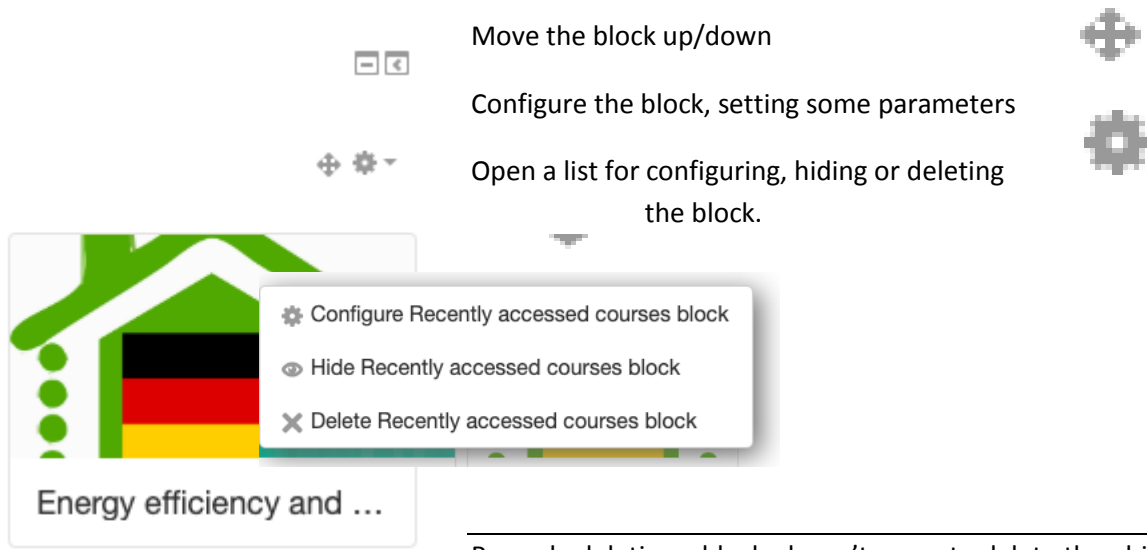Customise this page   ☰ Hide blocks ↗ Full screen

Customise this page

If you click this command, the text of the command will change, enable you to switch back to the original, standard view, and finish customizing the page:

Reset page to default   Stop customising this page

New icons will appear as well at the right top of each block:

Move the block up/down   ✥

Configure the block, setting some parameters   ⚙

Open a list for configuring, hiding or deleting
                the block.

⚙ Configure Recently accessed courses block
👁 Hide Recently accessed courses block
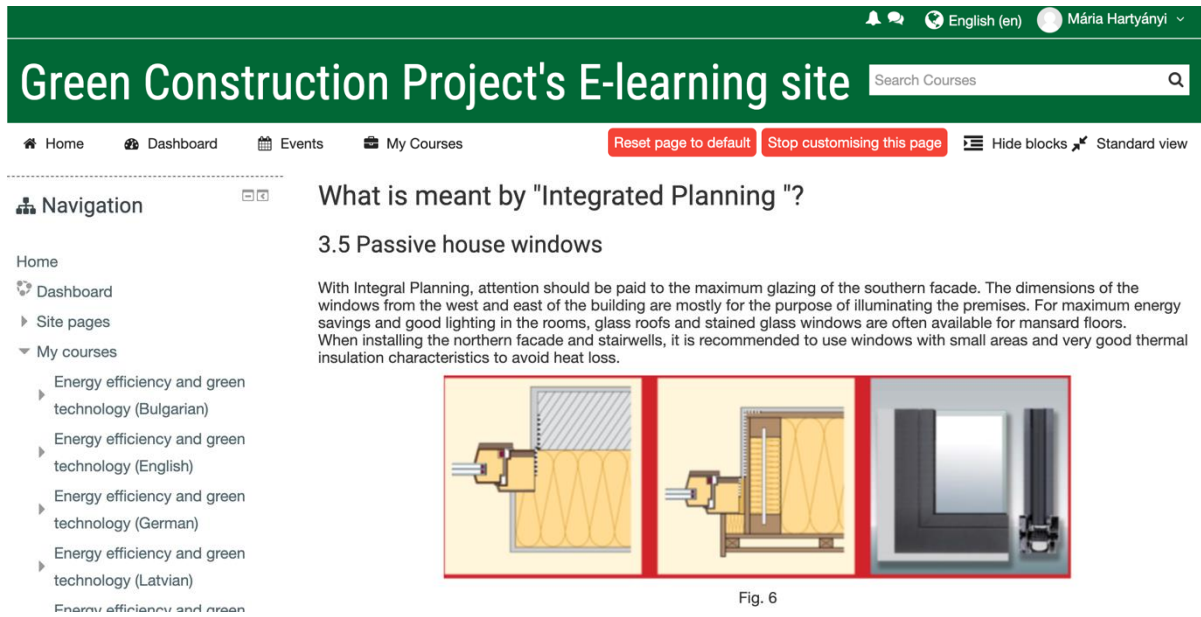✖ Delete Recently accessed courses block

Energy efficiency and ...

Remark: deleting a block, doesn't mean to delete the object (e.g. course) itself. You delete it only from the present view, later you can put it back if you want to.
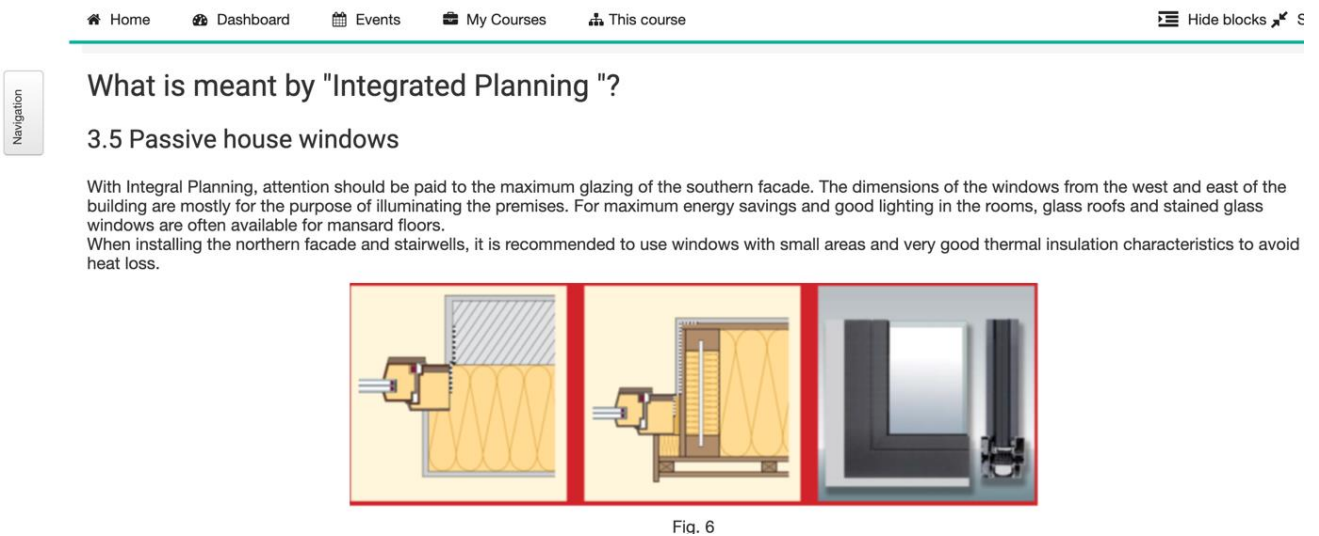
Customise this page   ☰ Hide blocks ↗ Full screen

☰ *Hide blocks:* With this command you can hide all blocks from the left side by one single click. This is a switch, after clicking it, the menu changes to *unhide blocks* with which you can display the blocks again.

As you see, with blocks on the left side you will have smaller part of the screen for the learning content.

Without blocks:

↙↗ Full screen

It helps to use the most part of the screen as your working area. It is also a switch, after clicking it, it changes to ↗↙ **Standard view**.
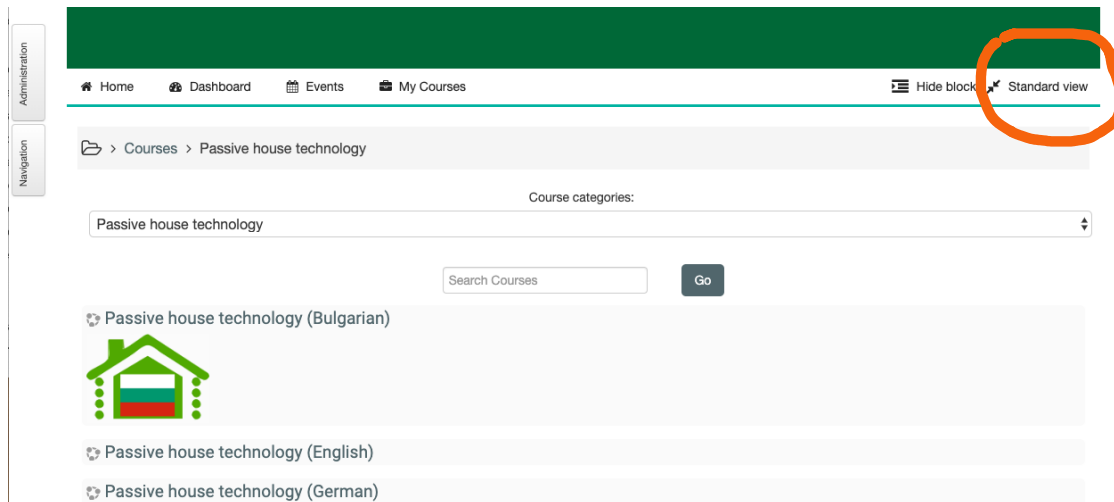
COURSE MENU

If you are learning on full screen, and you close all blocks in order to get more paces for the learning content, it will be complicated to find the commands, so you have a new menu point "***This course***"
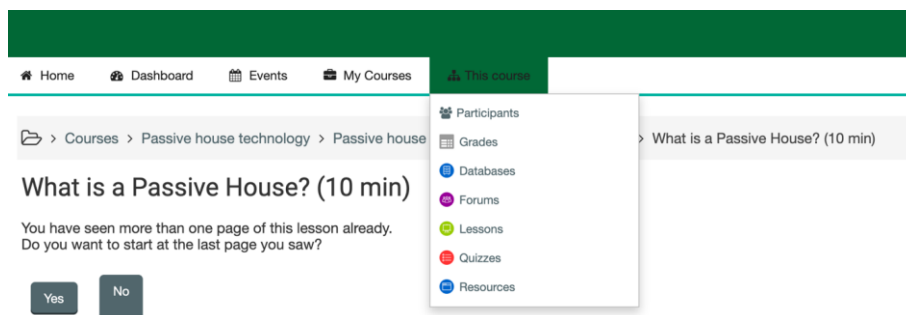
PARTICIPANTS

The menu offers possibilities to keep contact with other participants of the course (***Participants***):

After clicking one of the names, you can send a message to the selected person.
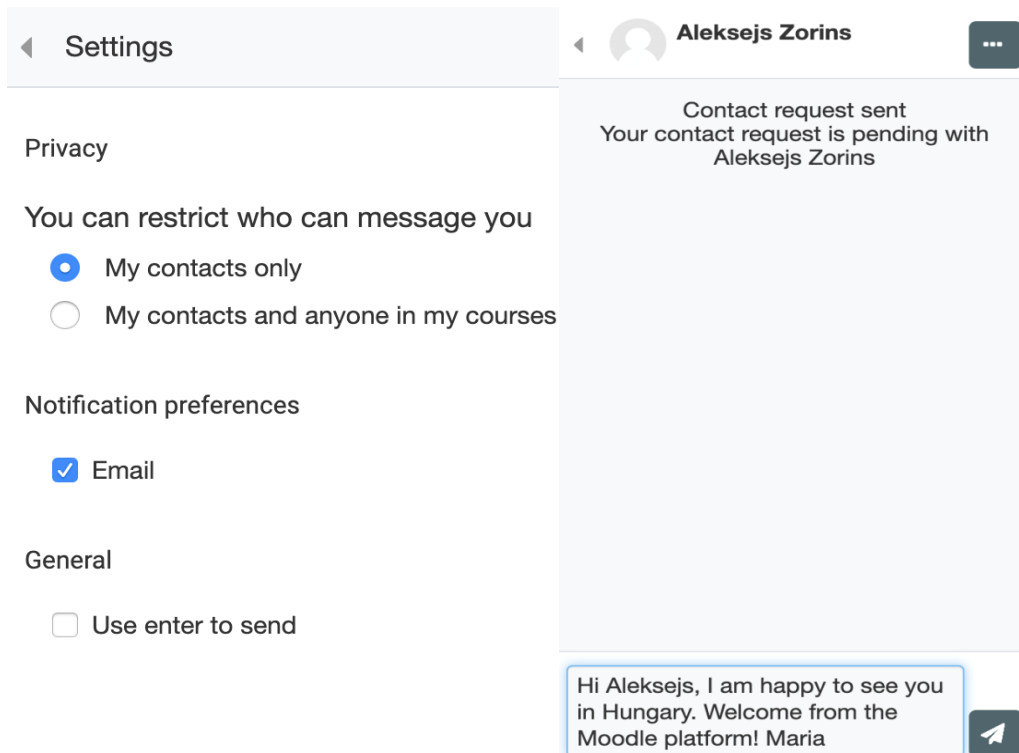
You can decide whether the person should get an e-mail with your message or should get the message only when she/he will enter the platform next time.

Remark: special settings and editing can be done if you see this icon:

The further menu points include a list of the components of the course:

Databases: the trainers can create simple databases for collecting information for instance about special products related to the topic and can give right to the students for collaborative work on collecting information and store in the database.

Forums: for communication asynchrony among the participants. See the detailed description later in this guide.

LESSONS

Lessons: lists the topics with your grade and deadlines to complete in case the trainer defined it.

⌂ Home   ⚙ Dashboard   📅 Events   💼 My Courses   ⛓ This course

📁 > Courses > Passive house technology > Passive house technology (English) > Lessons

Lessons

Topic	Name	Grade	Deadline
Topic 1	What is a Passive House? (10 min)	0	No deadline
Topic 2	The History of Passive Houses and Passive Building	0	No deadline
Topic 3	What is meant by "Integrated Planning "?	0	No deadline
Topic 4	Orientation, layout and location on the passive house	0	No deadline
Topic 5	5. The passive house building form	0	No deadline
Topic 6	6. Building Envelope	0	No deadline

Clicking one of the titles, you will be navigated to the selected lesson, which includes link to the content and in some cases a video lesson as well.

LEARNING CONTENT

You can access the content by clicking the title (in that case "*What is passive House?*").

The remark "*Not attempted*" is notifying you, that you haven't completed this lesson yet. In case you have read some parts of the topic before, you will get a notice, as you see below.

□ › Courses › Passive house technology › Passive house technology (English) › Topic 1 › What is a Passive House? (10 min)

What is a Passive House? (10 min)

You have seen more than one page of this lesson already.
Do you want to start at the last page you saw?

Yes   No

You can decide by clicking "Yes" or "No" depending that it is the first time you want to start reading this lesson, or you want to continue your last learning.

Next

If you just start, you will get a table of content, and you can go on by clicking the titles, or the button.

□ › Courses › Passive house technology › Passive house technology (English) › Topic 1 › What is a Passive House? (10 min)

What is a Passive House? (10 min)

Content

1. Introduction
2. Passive house definition
3. Sixth Principle of the Passive Building Concept
4. Low energy houses – or Nearly Zero Energy Buildings
5. Passive House Myths

Next

Another example from the learning content
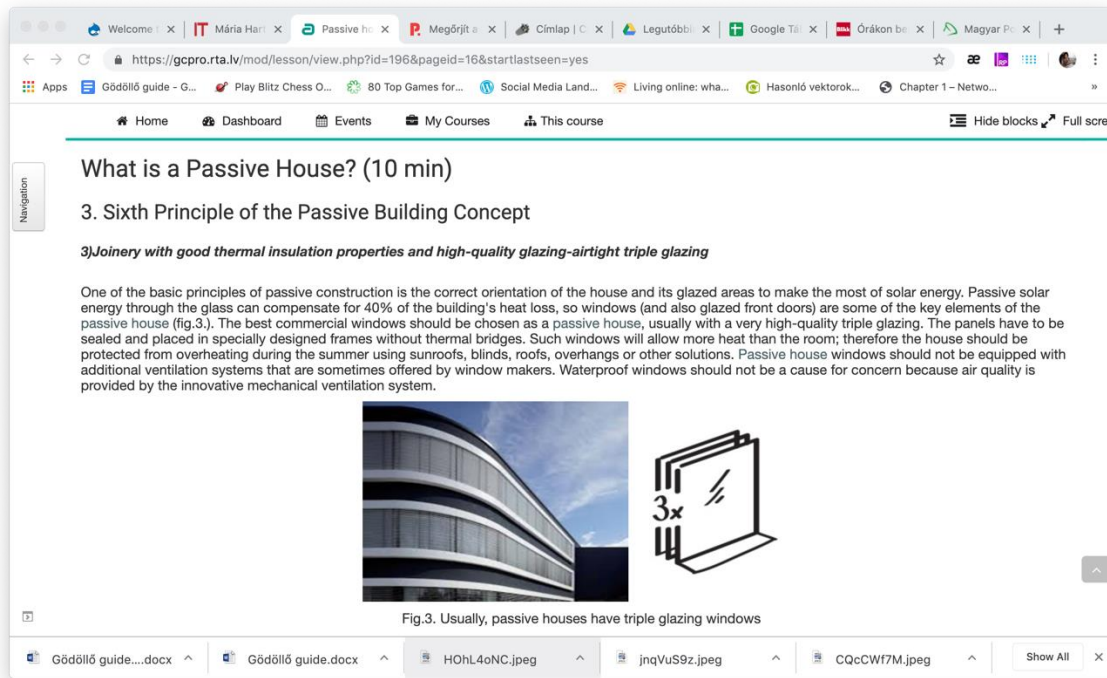
The last section of the lesson is a summary of the topic, titled: Conclusion.
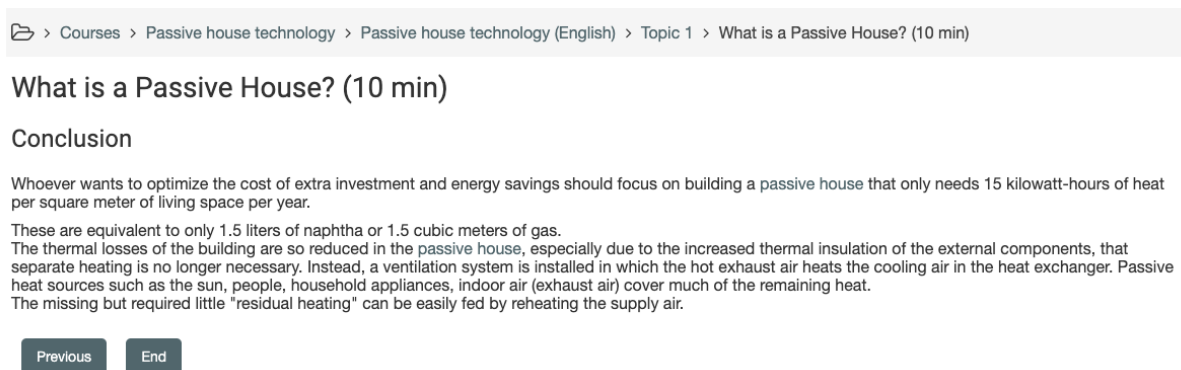
After clicking End, you get a message and a summary about your grades.

VIDEO LESSONS

Depending on the topics, you find finally, you have an option to watch a video, and read its transcript as well. The videos inserted here are usually Open Educational Resources published under Creative Common license, what means that they can be used freely for educational purposes.

GREEN
CONSTRUCTION

Passive House Explained in 90 Seconds on Vimeo

🔒 https://vimeo.com/74294955

vimeo

01:30

Passive House Explained in 90 Seconds

5 years ago | More

Video Lesson1

Ever wondered if your heating or air conditioning in your house is really necessary? Passive House (Passivhaus) is a design approach to buildings that reduces the energy required drastically. This video explains briefly in 90 seconds how it's done.

About me: I'm a Certified Passive House Fan (officially: Certified Passive House Consultant) In 2013 I founded Pinwheel. Head on over to http://www.pinwheelbuilds.com and http://www.pinwheelstructures.com to see what I do.

If you'd like to use this video, please share and embed it freely. Please attribute and don't use it for commercial purposes. It is under a creative commons license "Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0"http://creativecommons.org/licenses/by-nc-sa/4.0/

If you'd like to translate it into another language, please contact me at info [at] pinwheelbuilds.com. I an send you the raw video so you can add your voice over. I'd like to host the translated version here too.

Click https://vimeo.com/74294955 link to open resource.

QUIZ

After finishing the lesson, you are asked to give your feedback by filling out a question-based test.

Depending on the decision of the trainer, usually you are allowed to fill out the quiz several times, and your final score will be the value you reached. If it is not the 1st attempt, you will get a message as follows, so you can start with your "Re-attempt" if you want to improve your former results.

Otherwise you get another message, to start with the quiz at the 1st time:

You have to answer the questions one-by-one:

When you are over all of the questions, you can decide to start again, or to submit your present solution:

5	Answer saved
6	Answer saved
7	Answer saved
8	Answer saved
9	Answer saved
10	Answer saved
11	Answer saved
12	Answer saved

Return to attempt

Submit all and finish

After submitting the solution, you will get a summary about your result, and you can check the correct answers for every question.

Courses > Passive house technology > Passive house technology (English) > Topic 1 > Passive house technology > Summary of attempt

Passive house technology

Summary of attempt

Question	Status
1	Answer saved
2	Answer saved
3	Answer saved

Courses > Passive house technology > Passive house technology (English) > Topic 1 > Passive house technology

Started on	Sunday, 28 April 2019, 9:51 PM
State	Finished
Completed on	Sunday, 28 April 2019, 9:54 PM
Time taken	3 mins 2 secs
Marks	4.40/12.00
Grade	**3.67** out of 10.00 (**37**%)

Question 1

Incorrect

Mark 0.00 out of 1.00

⚑ Flag question

How many percent of total energy consumption in the world today is due to buildings?

Select one:

- ⊙ a. 50% ✗
- ○ b. 40%
- ○ c. 70%
- ○ d. 10%
- ○ e. 20%

Your answer is incorrect.
The correct answer is: 40%

Question 5
Partially correct
Mark 0.40 out of 1.00
⚑ Flag question

Passive house must have a special isolation of:
(specify the correct or correct answers)

Select one or more:
- ✓ a. windows and doors ✔
- ✓ b. Roof ✔
- ☐ c. the outer walls
- ☐ d. floor slabs
- ☐ e. the inner walls

Your answer is partially correct.
You have correctly selected 2.
The correct answers are: the outer walls, the inner walls, Roof, floor slabs, windows and doors

Question 6
Incorrect
Mark 0.00 out of 1.00
⚑ Flag question

How many percent is the percentage difference in energy consumption in a low energy house and passive house?

Select one:
- ○ a. 55%
- ○ b. 65%

🗁 > Courses > Passive house technology > Passive house technology (English) > Topic 1 > Passive house technology

Started on	Sunday, 28 April 2019, 9:51 PM
State	Finished
Completed on	Sunday, 28 April 2019, 9:54 PM
Time taken	3 mins 2 secs
Marks	4.40/12.00
Grade	**3.67** out of 10.00 (**37**%)

GLOSSARY

You find a menu point in the menu of *this course* called *Glossaries.*

In this course at present there are two glossaries, the main glossary contains 150 entries, the other one is at present empty, but later it can be extended by the trainers.

🗁 > Courses > Passive house technology > Passive house technology (English) > Glossaries

Glossaries

Topic	Name	Entries
	Glossary	150
Topic 1	Glossary T1	1

You can enter the main glossary, by clicking the name:

Glossary

Search ☑ Search full text

Add a new entry

Browse the glossary using this index

Special | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | **ALL**

Page: **1** 2 3 4 5 6 7 8 9 10 ... 15 (Next)
ALL

A

Absorption

Absorption of liquid or gas from the whole volume of a solid or liquid

🔗

Adobe

A rectangular block made of yellow clay, straw and water and sun-baked (or in a special body), which in the past served as a building material.

You have several options to search for a concept:

- You can write into the search field what you look for,
- You can list the concepts by clicking the starting letter of the word

Every entry includes the concept and the explanation of it.

COMMUNICATION IN THE FORUM

Forum

The Forum is an asynchronous communication tool, which means that participants do not have to be logged in on the portal at the same time to use it for communication. Messages are stored in order that participants visiting the forum can see and reply to them any time.

The forum activity allows students and teachers to exchange ideas by posting comments as part of a 'thread'. Files such as; images and media maybe included in forum posts. The teacher can choose to rate forum posts and it is also possible to give student's permission to rate each other's posts.

Let's see a video on how to use the forum:

https://www.youtube.com/watch?time_continue=11&v=3M7G9aJVGY0

The forum activity module enables participants to have asynchronous discussions i.e. discussions that take place over an extended period of time.

Participants can subscribe to a forum to receive notifications of new forum posts. A teacher can set the subscription mode to optional, forced or auto, or prevent subscription completely. If required, students can be blocked from posting more than a given number of posts in a given time period; this can prevent individuals from dominating discussions.

Forum posts can be rated by teachers or students (peer evaluation). Ratings can be aggregated to form a final grade which is recorded in the gradebook.

Forums have many uses, such as

- A social space for students to get to know each other
- For course announcements (using a news forum with forced subscription)
- For discussing course content or reading materials
- For continuing online an issue raised previously in a face-to-face session
- For teacher-only discussions (using a hidden forum)
- A help centre where trainer and students can give advice
- A one-on-one support area for private student-trainer communications (using a forum with separate groups and with one student per group)

ENTER THE FORUM, READ THE POSTS

Before entering the forum, some information is visible about the forum. On the left side the forum name is visible, which is clickable and forwards the user to the forum. The second column displays how many topics were posted in this forum. The Posts column shows the number of total posts in this forum. The last column displays the author of the latest post and when it was posted

By clicking the name of the forum, you will see the topics and after clicking a topic you will be able to read the posts, you can add a new post as well.

The forum topic is the place where the communication takes place. After entering a topic, the title will appear. Below it there is the date when it was published and the author. The text below the date is description about the topic. Underneath there are some links "forums", "tags" and "subscription". You can attach documents or any digital content to your posts.

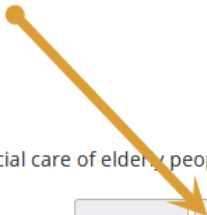## ANSWERING A POST

If you want to answer a post of other participant, you have to click the Reply button below the description of the topic.

The forum posts are similar to the structure of the e-mail, but here it is obligatory to fill in the **Subject** and **Message**, while to attach a document is optional.

WRITING A MESSAGE BY USING THE EDITOR

When you start to write a post, a new window will open with series of icons to edit, format your text.
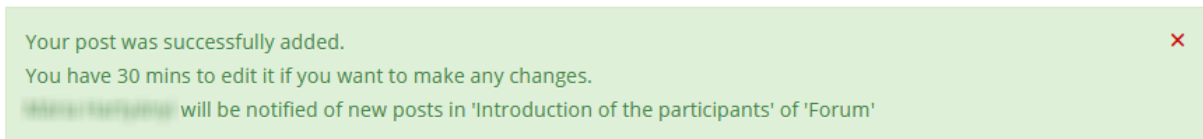

These are some basic text handling tools which might be already familiar from Word or any other text processing software. You can "cut", "copy", "paste", "paste as plain text" or "paste from word".

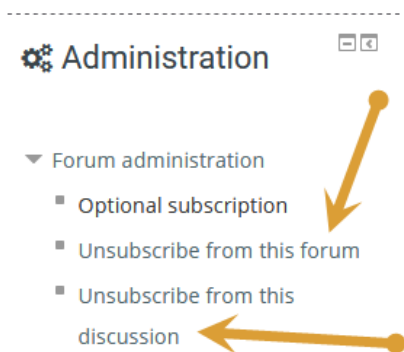If you have already written your text in a Word document, you just have to paste it with this tool.

You might be familiar with the basic formatting icons, like below for giving special Heading 1, 2, 3 styles to the selected paragraph.
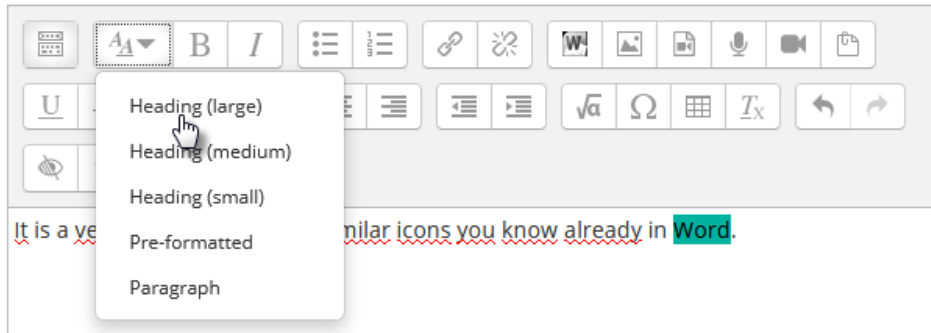
When you click the **POST TO FORUM** button below the message, then you will see at once your completed text message, but you have **30 minutes** to correct, to modify your text, then the system will send an e-mail automatically to all participants who are subscribed to this forum.

Your post was successfully added.
You have 30 mins to edit it if you want to make any changes.
_____ will be notified of new posts in 'Introduction of the participants' of 'Forum'
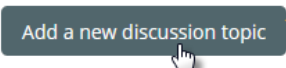
E-MAIL OF THE MESSAGE

Why will you get e-mail about the forum messages? This is a setting in the e-learning system, chosen by our system administrator because we think that option is useful. If this option is checked, you need not to visit the site to see whether there are new messages or not. You can read the messages in your e-mail. However, if the e-mails would bother you, you can unsubscribe from the forum in the left block, called ADMINISTRATION.

ADDING NEW TOPIC TO THE FORUM
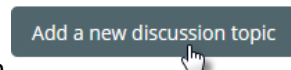
You can start a new forum topic, if you want, by clicking the button [Add a new discussion topic] at the top of the forum. However, please pay attention: do it only if there aren't similar topic opened before! Otherwise the discussion will be too fragmented, and it will be very difficult to follow the stream.

Forum

Add a new discussion topic

Discussion	Started by	Replies	Last post
Introduction of the participants	Mária Hartyányi	0	Mária Hartyányi Wed, 27 Mar 2019, 12:25 PM
Technical issues	Mária Hartyányi	0	Mária Hartyányi Wed, 27 Mar 2019, 12:25 PM

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