ed discussion

Using Ed Discussion to run exercises and live lectures

Center for Digital Education (CEDE) and Teaching Support Center (CAPE)

Feedback and Support: flexible-teaching@epfl.ch

More information: https://go.epfl.ch/flexible-teaching

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Introduction

Ed discussion is a 'forum' tool that can be used to manage questions in exercises (as well as projects, labs etc.). In ed discussion:

- Students post questions (in text, or using LaTeX, code, files, or by attaching photos of their work).
- Students comment on others' responses to elaborate.
- Students search for already asked and answered questions.
- TAs answer questions, or endorse good student answers.
- Students can ask TAs for a one-to-one meeting (for example on Zoom) by posting a private thread.

Using ed discussion for exercises involves 4 distinct procedures:

- Create an ed discussion activity in Moodle.
- Set up the ed discussion activity to match your needs.
- Managing ed discussion forum posts on exercise questions.
- Managing a Live Q&A during exercise sessions.

Alongside this 'quick start', you will find more details in the ed discussion documentation for teachers and documentation for students.

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Introduction

Anatomy of a forum

A post is initiated by a student who asks a question. Ed discussion is slightly different from a plain threaded discussion board (for example Slack or WhatsApp group):

- **Student Answer**. Students can answer a question and comment on others' answers. The purpose is to encourage students to find the answers by themselves.
- **Instructor's Answer**. TAs can privately discuss the questions and then post an answer.
- A discussion following a question automatically has a 'Resolved/Unresolved' status which indicates whether it needs further attention.
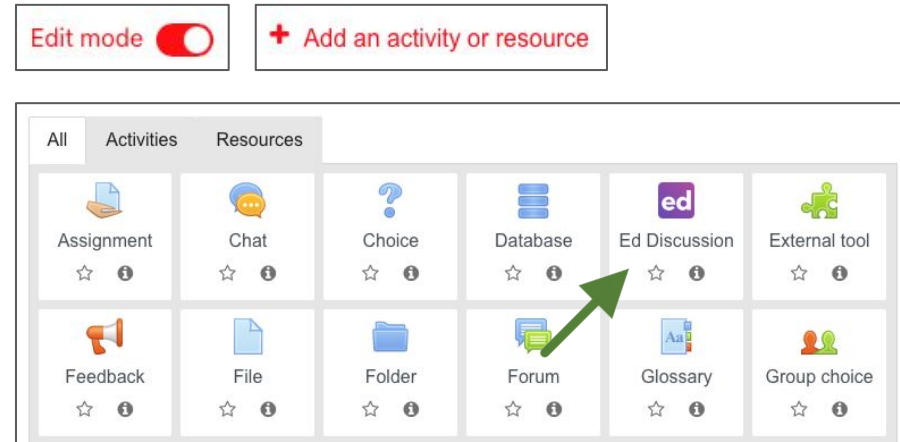
More advanced settings allow TAs to:

- Lock the post to prevent further editing
- Change who can see the post
- Delete the question
- Etc. (see the following pages)

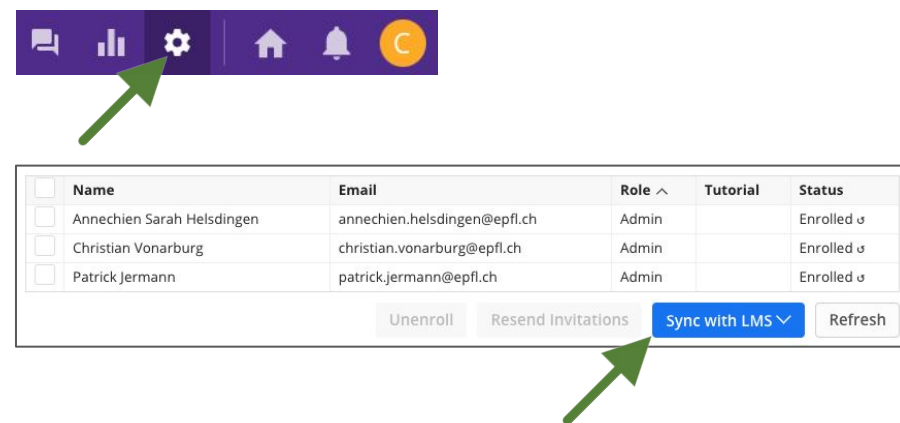| 1	A student asks a question	Question
2	Students answer TA endorses good answers TA answers the question	Students answer + TA endorses *or* TA answers
3	Students / TA mark the questions as resolved	Discussion resolved

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Create a course forum
Set up ed discussion in moodle

- On your course moodle page, 'turn editing on'.
- In the first week of exercises, 'Add an activity or resource'.
- Choose ed discussion (this will create an ed discussion activity in your moodle course).
  - When prompted, give the activity a name (for example 'ed discussion link for Exercises'), then click Save and display.
  - Ed discussion will invite you to write your first announcement (see example here), write it or skip this step and click on Finish.
  - Click on Settings and, under Users, sync users with moodle. Students of moodle will be automatically enrolled in the course forum.
- You only need to create one ed discussion activity in Moodle for all the exercise sets/sessions of your course - you can duplicate the same link to all weeks in which you have an exercise session using the 'Edit' menu for the ed discussion activity.

Create a course forum
Set up ed discussion for your class

Build your course structure:

- All questions in ed discussion are assigned to a 'folder'. By default ed discussion creates sample folders.
- You can set up ed discussion to match your course structure under Settings, Discussion, Categories. Create new folders and subfolders in the text box.

Other settings:

- Under Settings, Discussion, Discussion Features:
  - Select Anonymous Threads.
  - Deselect Names Visible To Staff (TAs won't see identities of anonymous threads).
  - Select Private Threads.

Categories

Define categories one per line and use the TAB key to indent and specify subcategories.

```
General
Lectures
        Week1
        Week2
        Week3
Assignments
        Week1
        Week2
        Week3
Social
```

☑ Category unselected by default
Requires the user to explicitly select a category before they can begin typing the thread content. Recommended if you are using thread templates.

Discussion Features

☑ Anonymous threads
Enables the option to create threads anonymously (the author's name will be hidden).

☐ Names visible to staff
Staff will be able to see the names of the authors of anonymous threads.

☑ Private threads
Enables the option to create threads that are private (visible to the author and staff only).

Use the course forum (basic)
Before the course starts

Maximising student usage of ed discussion:

- Introduce ed discussion to students and explain how it will be used in your course ([documentation for students](#)).
- Manage student expectations by stating, for example, that TAs will read and respond to posts twice per week - during office hours and during the exercise session.
- Ask students to try to answer each others' questions and to add to an already existing answer. The goal is to answer the query - not to provide a whole solution to the exercise.
- Encourage students to be constructive and to avoid offensive or rude comments in the forum ([see announcement example](#)).
- If students email questions to TAs or ask them verbally, post them (with your answers) to the forum (anonymously).

- Post some questions to ed discussion yourself to model the way you want students to use it (for example naming the post with the exercise number, making their question clear, etc.).

During each session, encourage students to:

- Search to see if their question has already been answered.
- Post their question anonymously (this encourages timid students to participate).
- Use the exercise name or number as the summary line (so it can be easily found by others).
- Try to answer each others' questions and to improve on each other's answers.
- Be constructive and to avoid offensive or rude comments in the forum.
- Book a one-to-one Zoom discussion with a TA using the individual messaging option in ed discussion.

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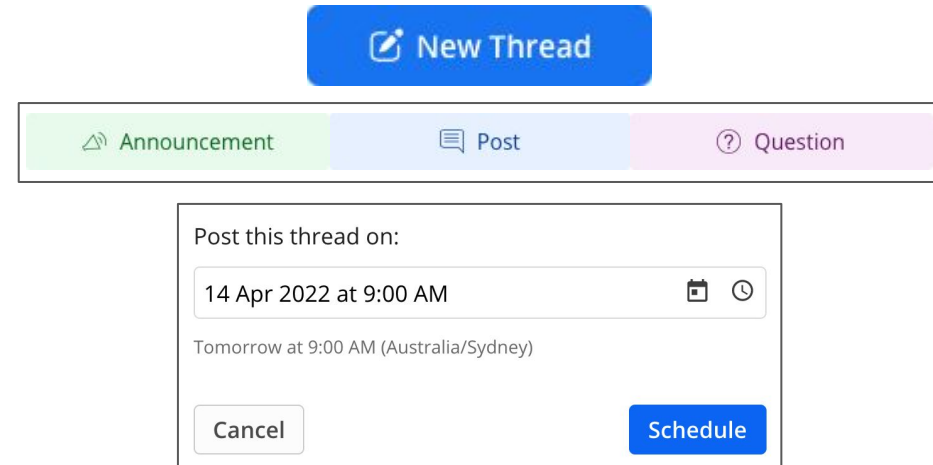# Use the course forum (basic)
Write

Write an announcement:

- Start your class with an announcement with some ground rules (example here): click on New Thread, then on Announcement. Detailed info here.

Write a question or a post:

- Click on New Thread, then on Question or Post. Detailed info here.

Schedule a thread:

- You might want to prepare content that you want to post on a specific schedule. Click on New Thread, then on Schedule (top right). Detailed info here.

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Use the course forum (basic)
Write

Use a template:

- You might want to receive questions in a specific format (i.e. the number of the exercise as a title, what student was able to do so far, etc.). For this, you can create a template applicable to students' specific questions. Detailed info here.

Write questions with hidden hints:

- When asking a question to your students, you might want to hide hints to solution. From the thread menu, select Spoiler and write your hint.

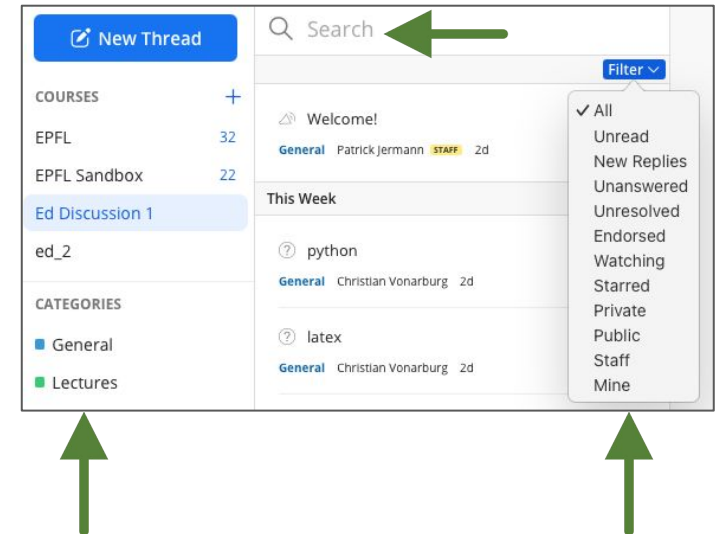More details on writing a thread here.

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Use the course forum (basic)
Read

Search for threads:

- Search threads by typing a keyword in the search bar.
- Filter threads by:
  - Category (the categories you set up for your course, for example Lectures, Assignments, etc.).
  - Criteria (unread, unresolved, private, etc.).
- Detailed info here

More details on reading a thread here.

Use the course forum (basic)
Respond

**Endorse an answer, reply, comment:**

- You can endorse a student's answer to a question, reply or comment by clicking Endorse, Reply or Comment below the thread. If you want to comment privately among TAs, click on Visible to staff only (bottom left of answer field). Detailed info here.

Refer to a question:

- In a reply to a thread, you might want to refer to another thread and create an automatic link. You can do that by using # + thread number (for example #1). Detailed info here.

Pin a thread:

- to Keep a thread on top of the list (for example your answer to a recurrent question), use the pin of the right hand side menu. Detailed info here.
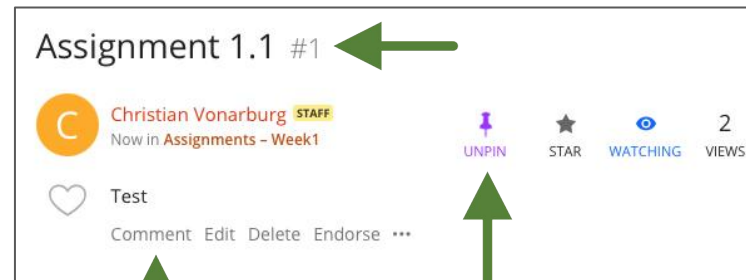
Use the course forum (basic)
Respond

Manage inappropriate content:

- Decline a thread to set it as private and lock it (below thread menu). Detailed info here.
- Delete a thread (below thread menu).
- See the identity of an anonymous thread by hovering the anonymous name. Detailed info here.
- Change the thread status to private (below thread menu).

Use the course forum (basic)
Content types

Text, images, videos, documents:
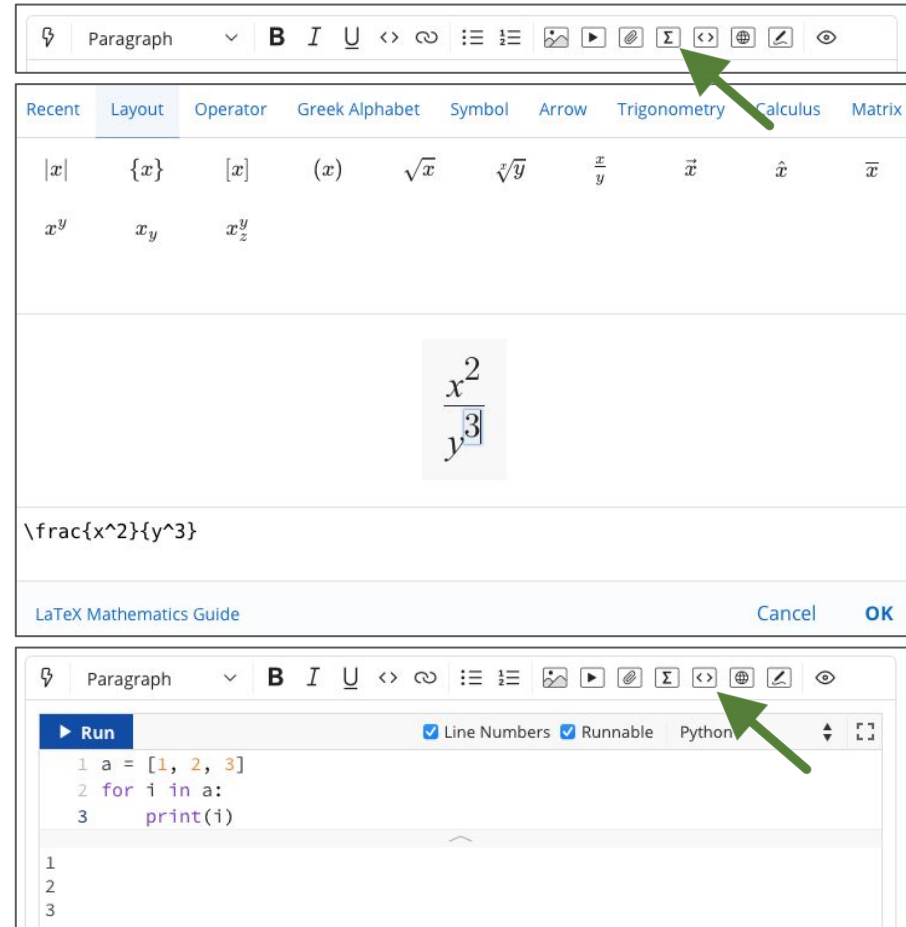
- The thread menu let you format text, insert images, videos and upload documents.
- You can annotate images with the annotate tool (✎).

Math:

- Write math with the math editor (Σ).
- Or with LaTeX using $$ before and after your formula (example: $$e=mc^2$$).

Code:

- Insert executable code blocks in various programming languages with the code snippet (<>). Choose programming language under Settings, Discussion.

Use the course forum (basic)
Get notifications

Specific thread notifications

- To follow the discussion of a specific thread, click the Watching icon.

General notifications and digests

- To set up how you want to be notified generally, go to Settings and Notifications.

[Detailed info here](#).

Use the course forum (live)
Manage a live Q&A

Megathreads

- Use megathreads to manage a live Q&A. Megathreads allow you to collate all questions on a specific topic into a single thread. Each comment can be resolved individually.
  - Select Megathread at the bottom of your thread.
  - Place it in a special folder (for example Lecture > Week 1)
  - Pin it so it appears first in the list of threads.
  - Sort questions by "top" so the most liked comments show up first.
- Students can upvote important unanswered questions by clicking on the little heart. The number of upvotes is indicated in red near the heart. TAs can identify priority questions by seeing which ones have most upvotes.
- Detailed info here.

Use the course forum (live)
Create polls

Polls

- Create polls to get students' insight. Select Poll in the thread menu (the small lightning bolt icon)
- The question and the Poll options can contain LaTeX formulas. Enclose the formula with "$$", e.g. $$\sqrt{230}$$.
- To do live polling during the class:
  - When preparing the message, select "Private". You will switch it to "Make public" during the class when you want students to see the poll.
  - When creating the Poll options, show "Advanced settings" and select "After poll is closed" for the "Result Visibility"
- Students can answer polls on their mobile via Pocket Campus > Moodle course > ed discussion.
- As long as the poll is not closed, students can revoke their vote (poll top right menu) and vote again.

Other functionalities
Create groups (open or closed)

For labs or targeted discussions, you can create groups:

- Under Admin (cogwheel), click on General
- Scroll down to Additional Features
- Tick the Chat option box
- Back to the discussion panel, go to Chat (top left menu)
- Under CHANNELS, create a new group (+New)
- Make it private if necessary
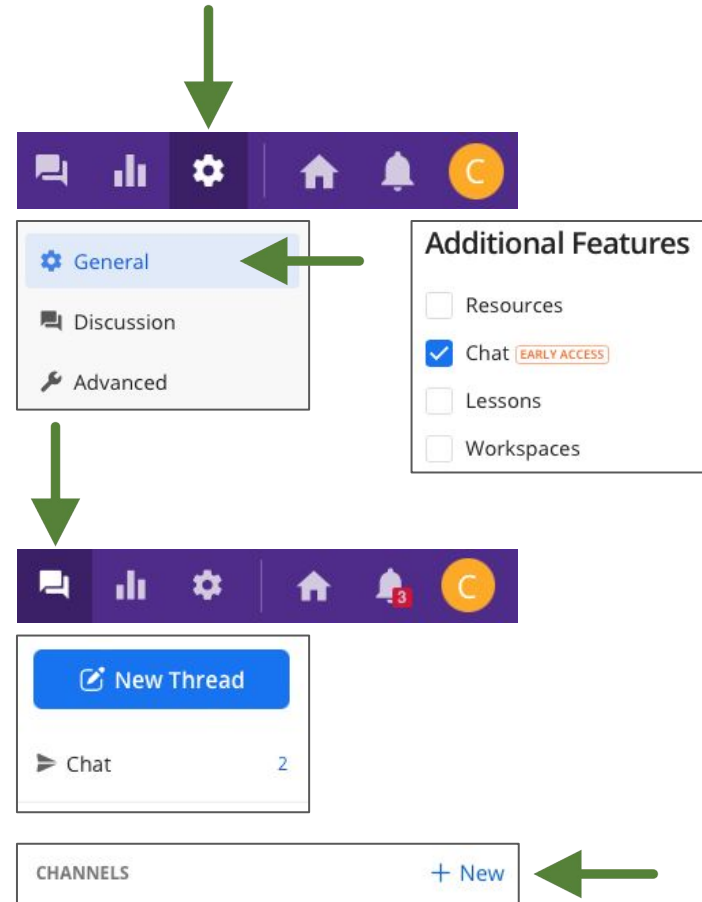
Other functionalities
Resynchronise the student list

After the semester begins, new students may enroll in your course. The list of participants in the Ed discussion forum will **not** be synchronized automatically. You will have to do this manually:

- Under Admin (cogwheel), scroll down to Users.
- Below the list of participants, press the blue button Sync with LMS.

Attention: this update will be done on all participants. If you have given a specific role to some of your students in the ed list without having unenrolled them and then re-enrolled them manually, their roles will be changed to their original state. **To make a change permanent, you must unenrol the participant and manually enrol them back with the new role.**

Name	Email	Role ∧	Tutorial	Status
Annechien Sarah Helsdingen	annechien.helsdingen@epfl.ch	Admin		Enrolled ↻
Christian Vonarburg	christian.vonarburg@epfl.ch	Admin		Enrolled ↻
Patrick Jermann	patrick.jermann@epfl.ch	Admin		Enrolled ↻

Unenroll   Resend Invitations   Sync with LMS ∨   Refresh
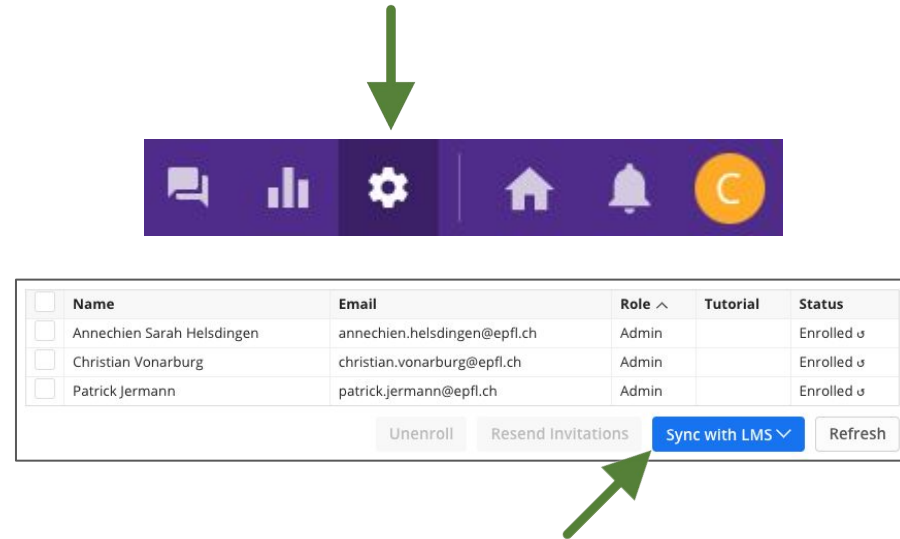
Other functionalities
Archive a course forum

- To prevent students from posting new threads after the course end (or during the exam period), archive the course forum. This will lock threads and put them in read-only mode.
- To archive a course forum, go to Course Admin, Advanced settings and click on Archive Course.
- Detailed info here.

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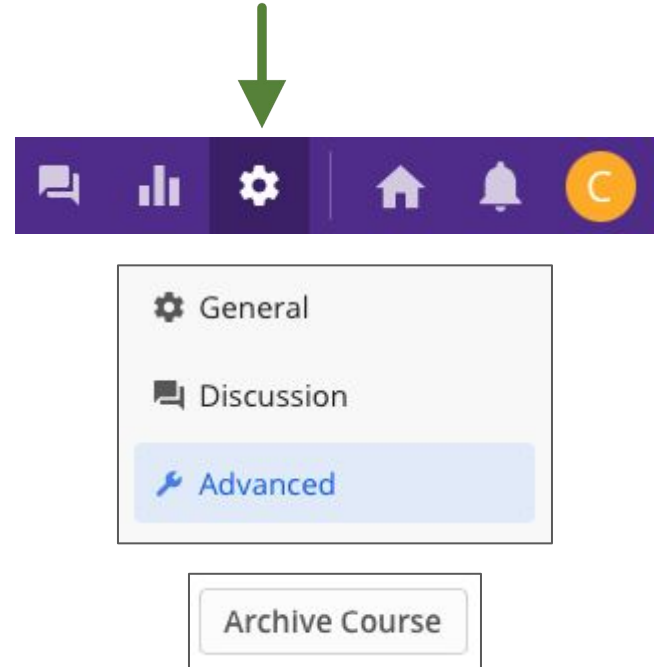
Other functionalities
Use 1 forum for 2 different courses

Instructors might need to use 1 forum for 2 different courses (for example 2 instructors give the same course, 1 instructor give a basic and an advanced course, etc.).

To set this up:

- First click your ed discussion forum links from each of the 2 Moodle courses (this will ensure that both of those courses have their own, separate, ed forums).
- Then email to support@edstem.org the 2 links to the 2 different ed forums (for example: https://edstem.org/eu/courses/123 and https://edstem.org/eu/courses/456).
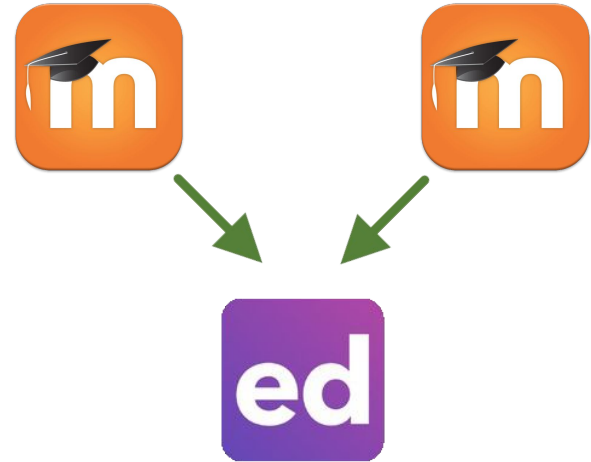
Other functionalities

Import from other course forums

You can bring in discussion threads from other course forums where you have admin. rights.

- Click on Admin and choose Advanced (left pane)
- Under Configure Courses (bottom), click on Copy Draft (if this feature is not enabled in your space, ask support@edstem.org)
- Choose the course you want to import from
- Choose the content to import
- Click on Copy draft
- You'll find the imported content in the Drafts folder.
- Open each item, assign them a category and click on Post.

Other functionalities
Ed discussion Bots

The Ed Bots API allow you to write JavaScript code to augment and extend the functionality of Ed Discussion.

- Use bots to automate actions on threads and comments (for example: if a thread contains a specific word, it will be rejected, or pinned, etc.).
- To enable the bot functionality, write to support@edstem.org.
- Once enabled, it will appear under Settings > Discussion, Bots (bottom).
- The Bot section offers:
  - A JavaScript editor.
  - Documentation.
  - Examples.
  - A thread tester.
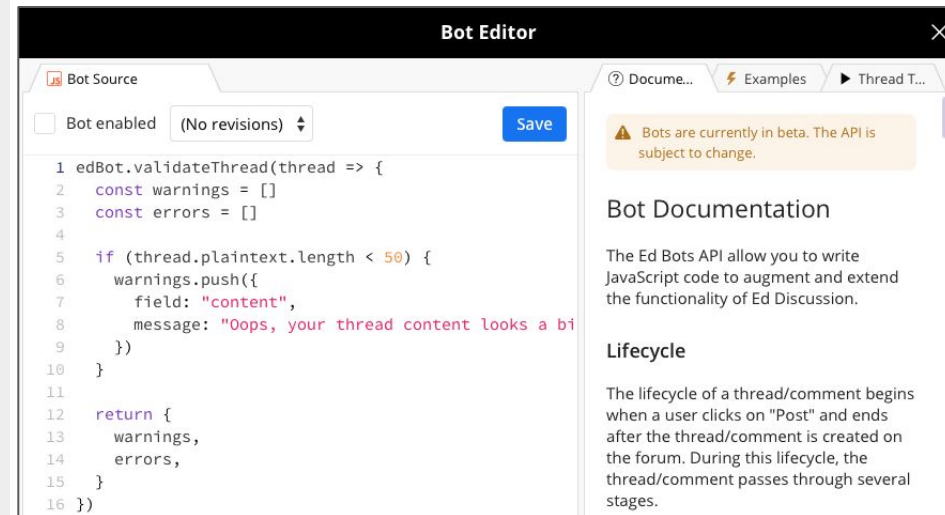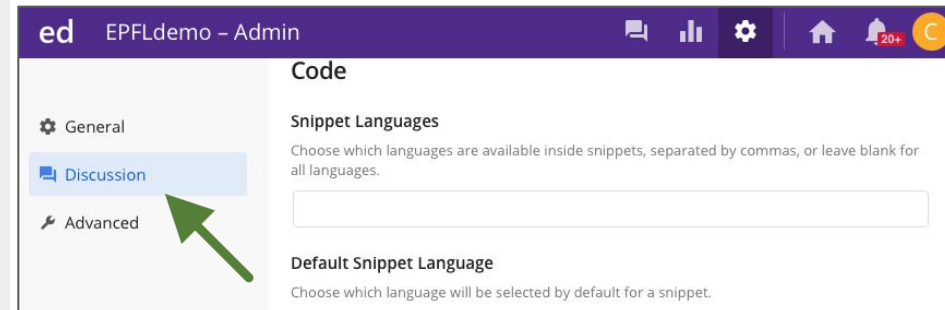
Other functionalities
API to automate your threads

Use ed's API to automate the sending of your threads:

- Request your personal access token here:
  https://edstem.org/eu/settings/api-tokens.
- Once requested, you'll have the API option under
  Account > Settings, left menu.
- You'll find an example of fetching a user on the API
  page.
- For other routes it's best to use the browser dev tools to
  inspect the API requests being sent to find the routes
  that contain the data needed.
- **Ed discussion API is in beta testing. Edstem
  doesn't guarantee a stable API.**

We can provide you with a script or run it for you:

- From an excel sheet, we can massively upload your
  polls (for ex. at the beginning of the semester). Contact
  christian.vonarburg@epfl.ch for more information.
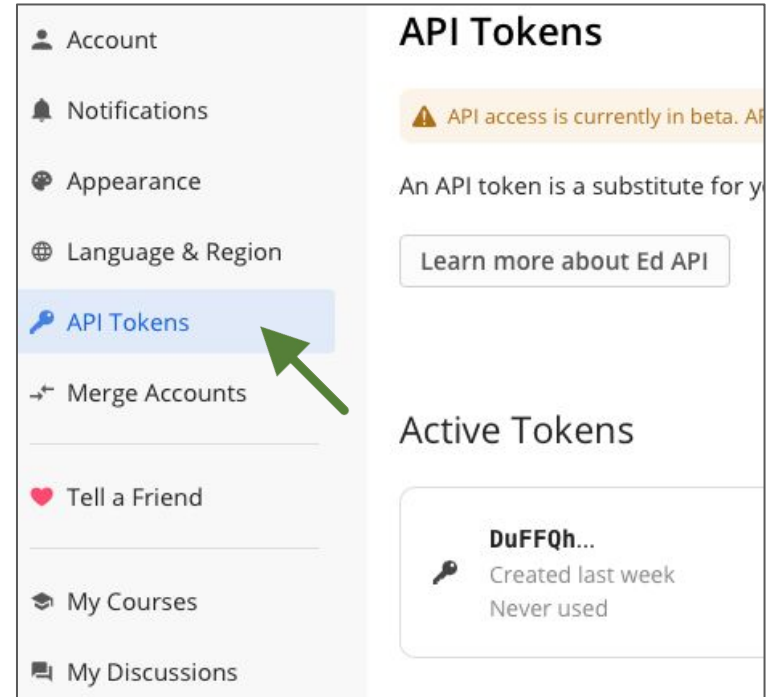
Other functionalities
EPFL AI tutors

Allow your students to get faster responses to their questions. Get help from an AI tutor to answer your students' questions.

To support teaching and learning, the Center for Digital Education (CEDE) offers customizable AI-powered chatbots that can be integrated directly into the course discussion forum. The chatbots, are based on Retrieval-Augmented Generation (RAG) technology, allowing them to use your course material to reduce the risk of answering with plausible nonsense (hallucinations).

More information [here](#).

What is the difference between Markov localisation and a Bayes filter?

Chatbot

Markov localization is essentially a specific application of the **Bayes filter** tailored for mobile robot localization, where the robot aims to determine its position based on a map and sensor measurements. In this context, the **Bayes filter** operates in two main steps: a prediction step based on the robot's motion and a measurement update step that incorporates sensor data to refine the robot's belief about its position. For a deeper understanding, you can refer to the slides on Markov Localization and Bayes Filter and Bayes Filter Basics.

Markov Localisation

Markov localization is just a different name for the Bayes filter applied to the mobile robot localization problem:

Algorithm Markov_localization($bel(x_{t-1}), u_t, z_t, m$):

for all x_t do — motion model (not always map dependent)

$\overline{bel}(x_t) = \int p(x_t \mid u_t, x_{t-1}, m) \, bel(x_{t-1}) \; dx_{t-1}$ — prediction

$bel(x_t) = \eta \, p(z_t \mid x_t, m) \, \overline{bel}(x_t)$ — measurement update

endfor — measurement model (map dependent)

return $bel(x_t)$

Markov localization can address the global localization problem (initial belief is uniform), the position tracking problem (initial belief is typically a tight Gaussian), and the kidnapped robot problem in static environments.

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FAQ

Display of ed discussion:
- How to prevent ed discussion from appearing embedded in Moodle? In Moodle, edit the ed discussion activity, go to Edit settings > General, show more > Launch container: New window.

Synchronisation:
- Is the synchronisation of participants done automatically after the opening of the ed discussion (if a new student joins after the course opening. Synchronisation is done once only. If new students are registered to Moodle, teachers must resynchronise.

Enrollment:
- Can UNIL students access ed discussion? Yes, via the Moodle page.
- If a participant's role is manually changed on ed, will it stay the same after a re-synchronisation ? No, it will change back to its original state (Moodle state). To make a change permanent, you must unenrol the participant and manually enrol them back with the new role.

Course structure:
- If course structure is changed during the course, will threads of the renamed categories disappear? Yes. If categories are renamed back to original, threads will appear again.

Anonymity:
- Is it possible for an instructor to disable the analytics? The analytics panel is only accessible for course admins (staff cannot access the analytics) and allows you to access/download all the information about your course. On Ed Discussion, students can be anonymous to each other but NOT to the course admins. In the analytics, you can see the name of an anonymous person.

FAQ

Polls
- How show the class a poll without showing the results? Freeze the beamer or use a student account.
- Can I edit or reuse polls within a forum? No, not on ed. An alternative to this is to embed external poll tools (like Google forms or Mentimeter).
- Can I reuse polls of other forums? Yes, if you are admin of the other forums ([more info here](#)).

Exports
- Can discussion content be exported? Content can be downloaded under Analytics > Analytics CSV (or JSON threads). Note: it can't be imported back in.

Students
- Can students create polls? No.
- Can students create spoilers? Yes.
- Can students access ed discussion without logging in to Moodle? Yes, with SSO.

- Can you prevent a student from deleting their question once they have received the teacher's answer (which deletes the teacher's answer too)? Yes, click on the 3 small dots in the original question and choose Lock.

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Support

https://go.epfl.ch/flexible-teaching

flexible-teaching@epfl.ch

Announcement example:

Course discussions give you the opportunity to start conversations with other students, ask questions that other students or the course team can answer, and participate in the course community. For more details on how to use course discussions, click **[here](#)**.

This course includes several discussion topics:
- Use **Social** to present yourself to others and socialize
- Use **The lecture discussions** to discuss ideas related to each lecture
- Use **The assessment discussions** to discuss ideas related to each assessment
- Use **Report a problem** to report problems concerning the course in general

Code of conduct:
- **Be respectful!** Debate in a polite and respectful manner.
- **Be constructive!** When commenting on other's projects, try to offer constructive feedback and suggestions that help them improve it.
- **Be sensitive!** Especially when discussing race, religion, gender, sexual orientation, or controversial topics. Others may be more sensitive about them than you are.
- **Post appropriately!** You may not post inappropriate (eg. pornographic) or copyrighted content, advertise or promote outside products or organizations, or spam the forums with repeat content.

Other guidelines:
- **Read before posting!** Your comment or question should build on what's already been discussed. If you have a question, scan through to see if it's already been addressed and use the search function to avoid creating duplicate threads and find the most appropriate topic thread to post in.
- **Use informative titles!** Keep your post titles short and on-topic so the forums are easier to navigate.
- **Make it easy to read!** Present facts and background in your post. Don't capitalize or bold entire sentences. Check your posts for spelling or grammatical errors.
- **Help keep this course friendly. If you think a project or comment is mean, insulting, too violent, or otherwise inappropriate, let us know about it.**

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