Using Microsoft Teams to Run an Online Course

Microsoft Teams has been used by some instructors for course delivery during the Spring 2020 term at UW. A major benefit of the platform is that multiple tasks, otherwise requiring multiple platforms, can be accomplished in one platform: live-meets and live-streamed lectures/tutorials with excellent audio and video quality, recording of lectures, posting of recordings (through integration of Stream), private and group chat, Q&A forums, simple polls, sign-up lists, sharing documents, etc.

The following document outlines a baseline how-to for using Microsoft Teams (including Stream) to deliver a typical engineering undergrad course. It is based on our course experiences during the Spring 2020 and details some of the functions and options that may not be obvious but were very useful, as well as some options that took a bit of time to figure out. Microsoft Teams was used in conjunction with Learn to deliver the courses. Learn was used for all formal correspondence/announcements, document distribution, student submittals, grades, etc., while Teams was used for day-to-day interaction with the students. The combination has proven effective, easy to use and was well-liked by students.

<div align="right">Dan Lacroix and Cory Zurell</div>

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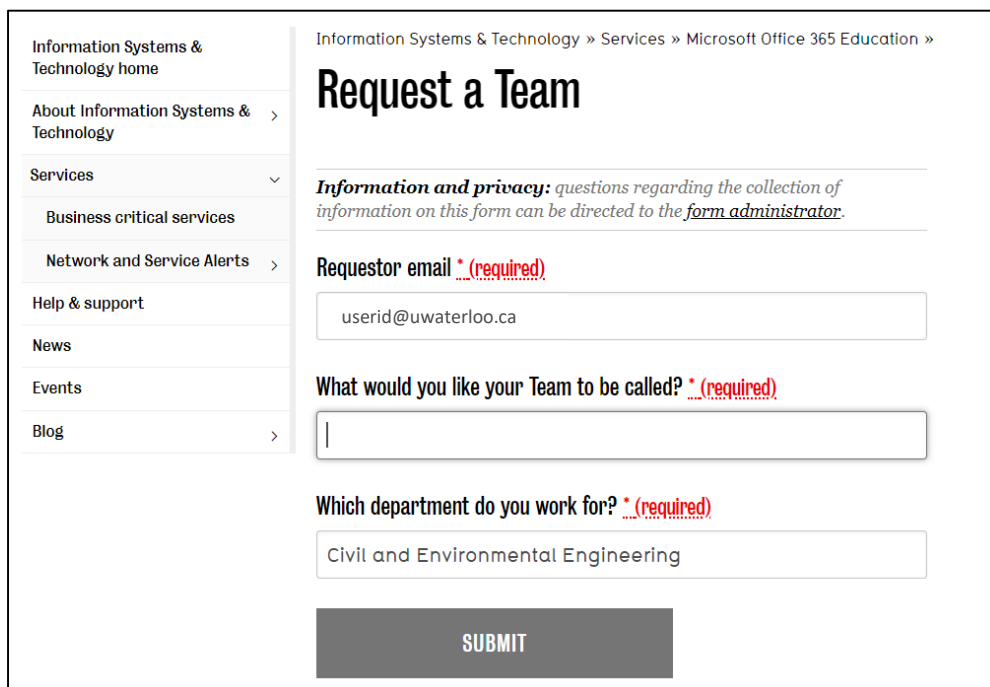
Authored By: Reid Ferry & Roger Chen

Setting Up a Microsoft Team

1. Currently Teams can accommodate up to 250 people on a Team. If your course is larger than that, you will have to use a different platform.

2. Request the creation of a MS Team from IST at this link:

   https://uwaterloo.ca/information-systems-technology/services/microsoft-office-365-education/request-team

   Fill in the name of your Team and the department (e.g. Civil and Environmental Engineering), then select **Submit**.

   Note: You need to be logged in with your WatIAM credentials to access the form.

Requesting a MS Team

Information Systems & Technology » Services » Microsoft Office 365 Education »

Request a Team

Information and privacy: *questions regarding the collection of information on this form can be directed to the* *form administrator*.

Requestor email * (required)

    userid@uwaterloo.ca

What would you like your Team to be called? * (required)

Which department do you work for? * (required)

    Civil and Environmental Engineering

SUBMIT

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3. IST will create a Team and notify you when it has been created.

Setting Up Channels in Microsoft Teams

1. Go to your new Team. The "General" channel will be created by default; however, you'll want more than one channel to run your course.

2. In the panel on the left, select **More options** "**…**" beside your Team name to open the dropdown, then select **Add channel**.

<p align="center"><strong style="color:red">More options > Add Channel</p>
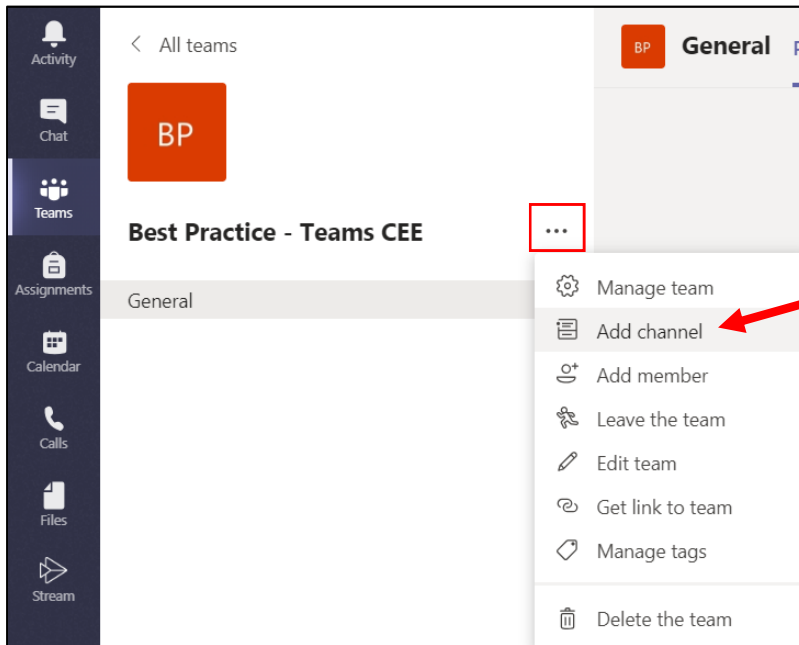
3. A pop-up will appear where you can enter your channel name, an optional description, and specify the privacy setting:

Standard	Anyone in the Team can see the channel. Useful for lectures, discussions, tutorials, etc.
Private	Allows you to restrict access to certain members. Useful for group projects where each group requires their own channel (e.g. capstone), or for having discussions within the teaching team.

Note: Ensure that "**Automatically show this channel in everyone's channel list**" is selected (this box is unselected by default). Students can hide/unhide channels later to declutter their own channel list.

Channel Setup

Create a channel for "Best Practice - Teams CEE" team

Channel name

> Letters, numbers, and spaces are allowed

Description (optional)

> Help others find the right channel by providing a description

Privacy

> Standard - Accessible to everyone on the team   ⌄   ⓘ

☐ Automatically show this channel in everyone's channel list

Cancel   Add

4. For **private** channels, you will get a pop-up allowing you to specify which members will have access to that channel. You can also add members later by going to your private channel, selecting **More options** "**…**" in the upper right, and then selecting **Add members**.

Add members to Private Channels

Add members to the Private channel test channel

This is a private channel, so only the people you add here will see it.

username@uwaterloo.ca   Add

                                                         Skip

5. Select **Add** once you're done setting up, the channel will be created immediately.

Ideas for Channels That May Be Useful for Your Course:

-   Lectures

-   Q&A

-   Office Hours

-   Tutorials

-   Coordination (private channel, for communication within the teaching team)

Managing Channel Permissions

1. You may not want everyone to have full permissions in every channel. Select **More options** "**…**" beside the channel you want to manage, and then select **Manage channel**.

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More options > Manage channel
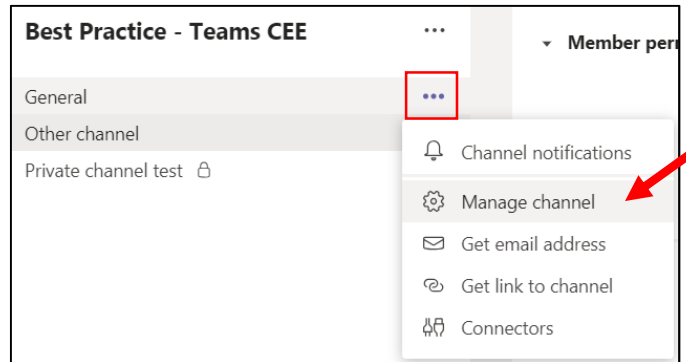
2. For the "General" channel, go to the **Channel settings** tab. Here, you can restrict who can post messages (either everyone, or team owners only). Restricting to owners only can make this act like an Announcements board.
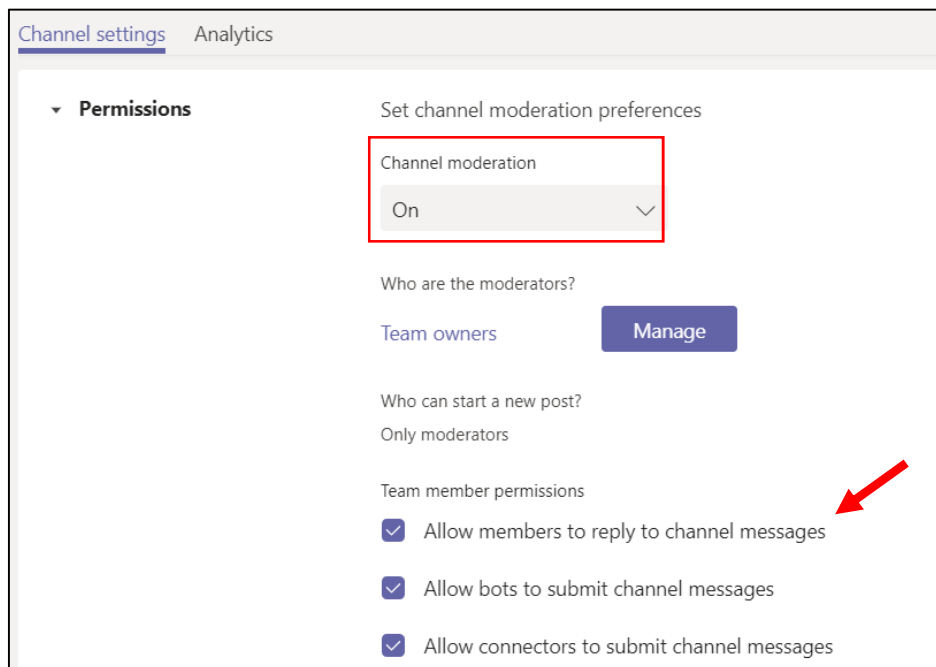
Channel Settings
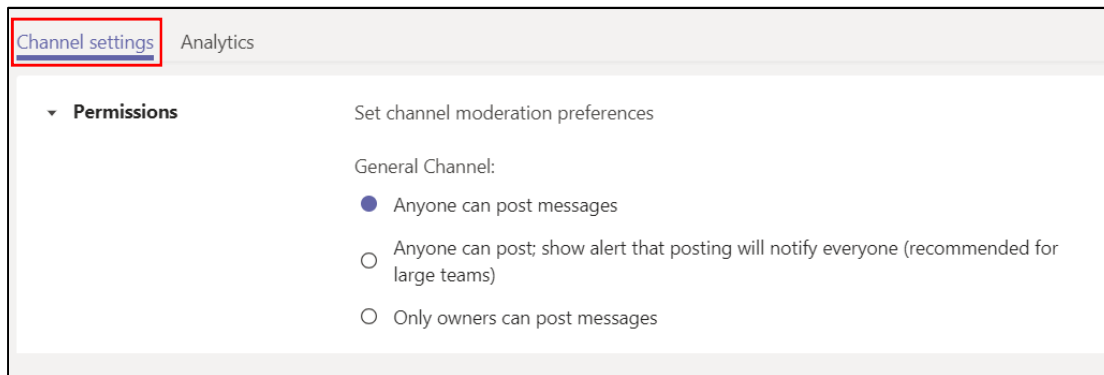
3. For other (**non-private**) channels, go to the **Channel settings** tab. Here, you can choose to make the channel **moderated** or **unmoderated**. In **unmoderated** channels, anyone in the channel can post (assuming you won't have any guests).

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Unmoderated Channel Settings
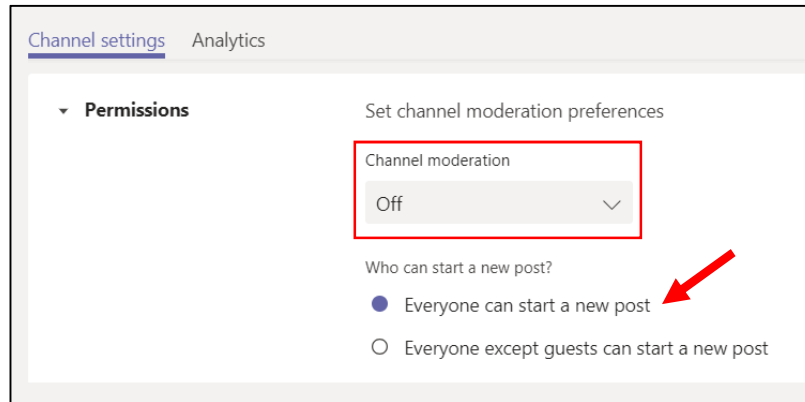
In **moderated** channels, you can designate moderators (e.g. instructors and TAs). Only moderators can create new posts, but students may reply to them if "**Allow members to reply to channel messages**" is checked.

Moderated Channel Settings

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4. For **private** channels, go to the **Settings** tab. You can control what members can do with their messages (e.g. editing/deleting messages, mention all channel members, and use GIFs/memes/stickers in their messages)

**Private Channel Settings**

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Adding Members to Your Team

There are two ways to add students to your Team: you can distribute a Team code for students to add themselves, or you can add students manually.
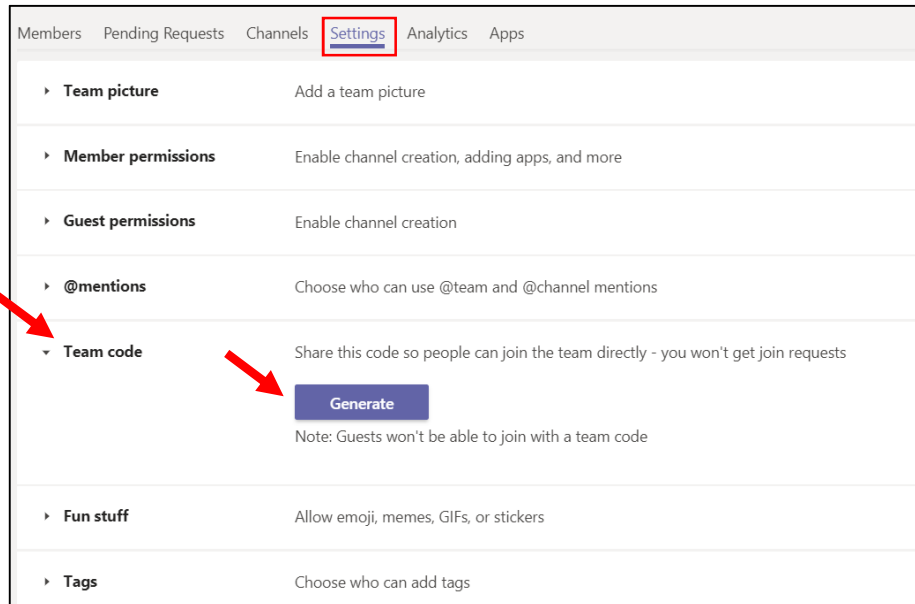
Adding themselves

1. To generate a team code, select **More options** "**…**" beside your team name, and then select **Manage team**.

More options > Manage team
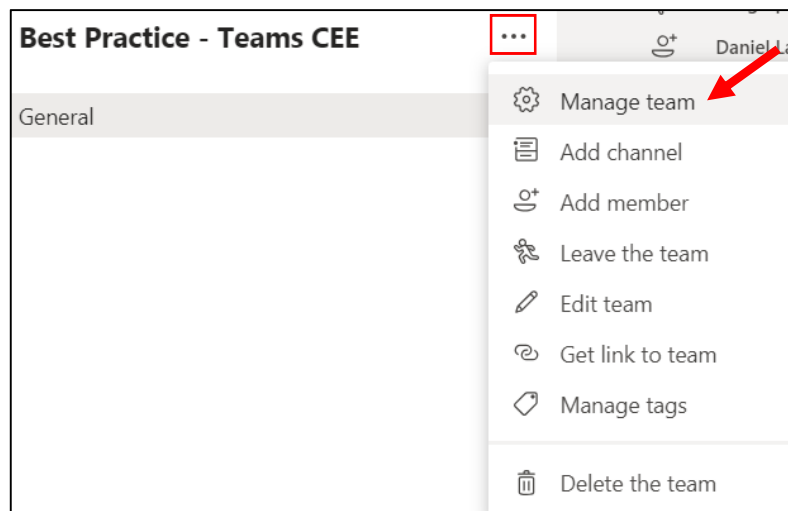
2. Go to the **Settings** tab and select the **Team code** section.

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Settings > Team Code

3. Select **Generate**. You'll get a Team code that you can distribute to students through email or LEARN announcement.

4. After everyone has enrolled themselves, select **Reset** to generate a new Team code. This deactivates the old Team code, so students won't be able to join using that code anymore. (Students who join the course late, i.e. during the add period, need to be added manually)
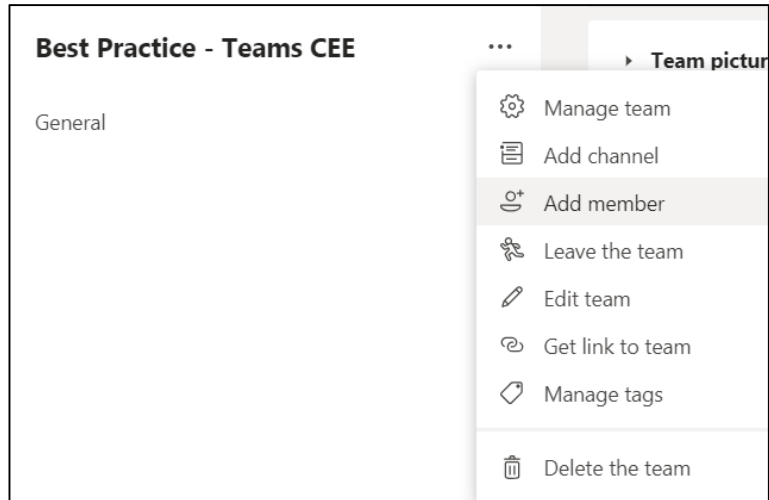
Team code

Authored By: Reid Ferry & Roger Chen
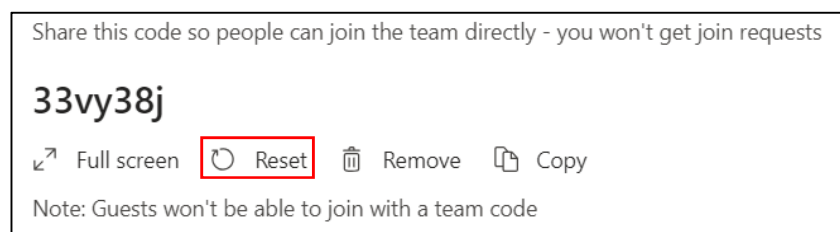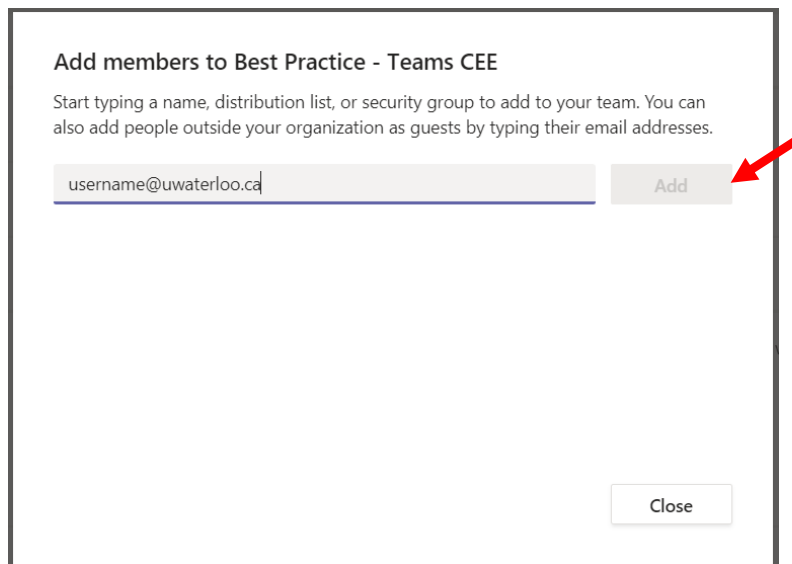
Adding members manually

1. To add students manually, select **More options** "**…**" and select **Add member**.

More options > Add member

2. In the pop-up, enter the names or emails of everyone you want to add.

Add members manually

3. When you're done, select **Add**. The new members will get an email notification.

Managing Student Permissions

1. Go to **Manage team** then the **Settings** tab.

2. Open the "**Member permissions**" section.

3. You'll see a series of permissions that you can either enable or disable for students. Most are turned on by default. You should turn off all **except** the last one, so that students can still edit their messages.

Manage team > Settings > Member Permissions
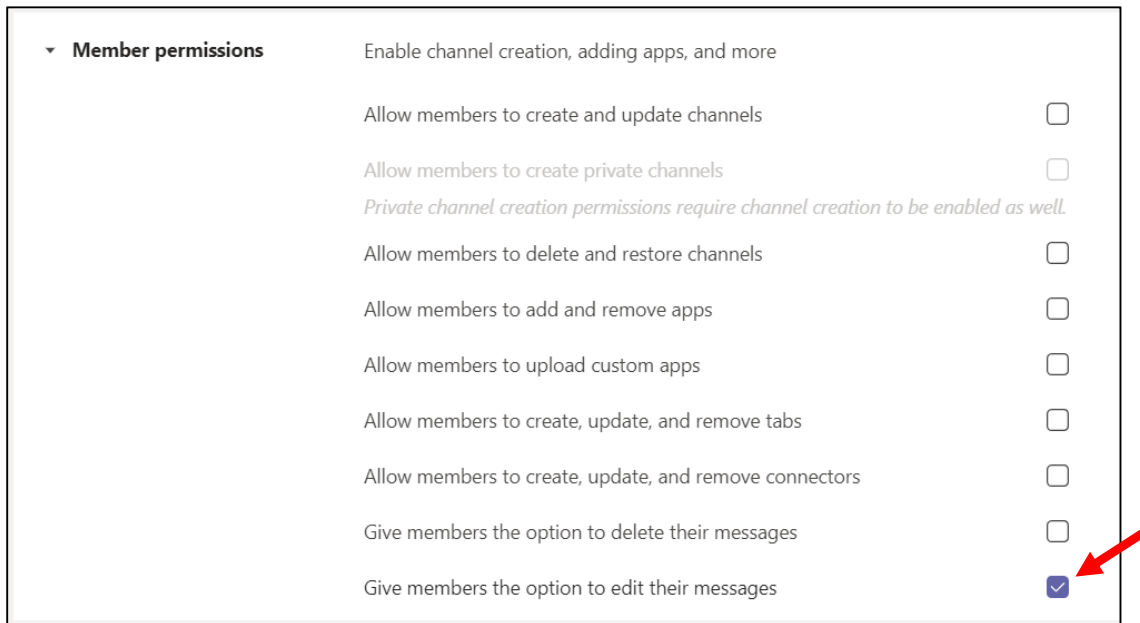
4. Instructors, TAs, and CAs will likely need more permissions that just these. You can change their status to "owner", which will give them full permissions, by going to the **Members** tab and changing their role using the drop-down menu.
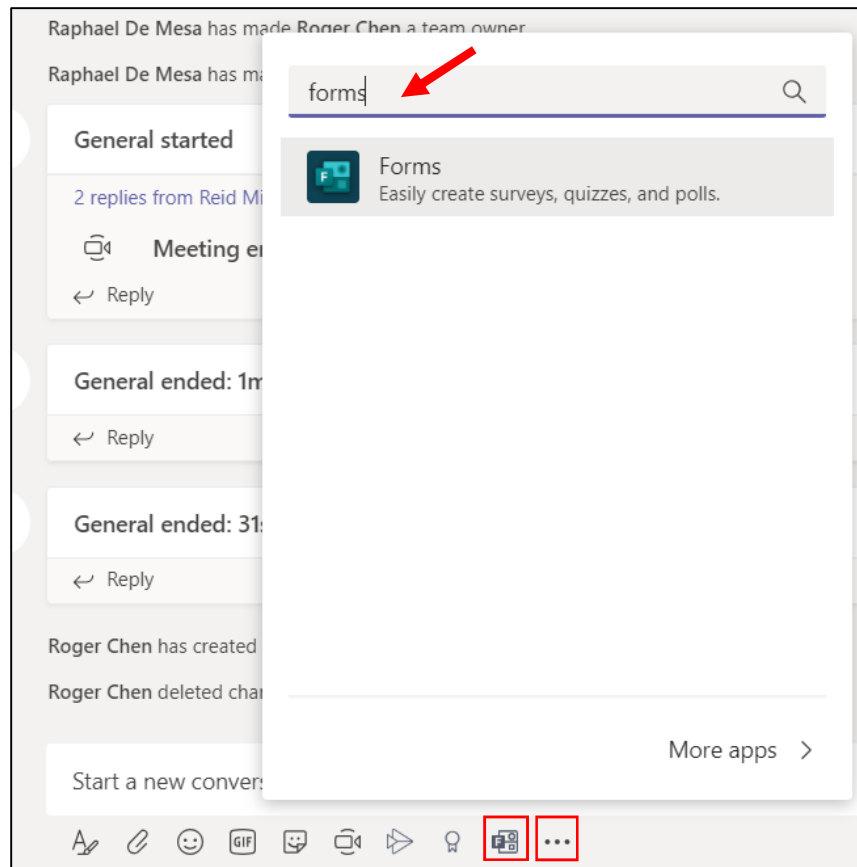
Members tab

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Creating Polls in Chats Using Forms

1. Go to the channel you want to create your poll in.

2. At the bottom, select the **Forms icon** . If the **Forms icon** doesn't appear, select **More options** "**…**" beside the icon bar. Search for "**Forms**" using the search bar at the top. The Forms app should appear; select the app to open it.

More Options > Forms

3. The **Form** template will appear. Enter your poll question in the first line, and possible responses in the following lines. Select on **+ Add option** if you'd like to have more than 2 choices.

> Note: If "**Multiple answers**" is left unselected, the question will be multiple-choice. If it is selected, the question will be a "check all that apply" format.

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Form Template

4. When you're done, select **Next**. You will have the chance to preview your poll from a member's perspective. If you'd like to make changes, select **Edit**. Otherwise, select **Send** to have the poll go live.

   Note: Polls and forms may be used during live lectures and meetings as well.
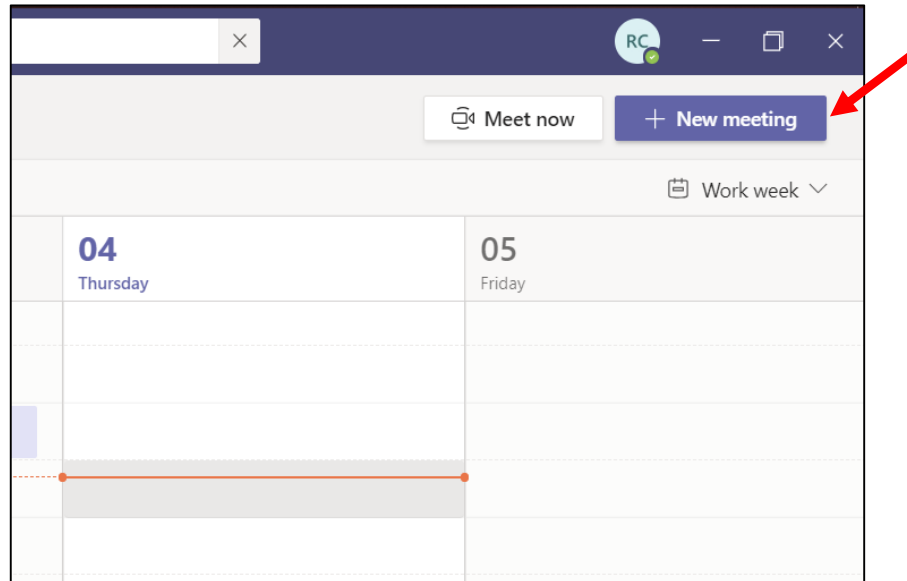
Edit/Send

Scheduling Lectures, Tutorials, and Office Hours Using Meetings

1. Select **Calendar** on the left of your screen to open your calendar.

2. Select **+ New Meeting** near the upper left corner

Calendar > + New Meeting

3. You can now set up your meeting details. Under **Required Attendees**, you can add TAs who will help moderate the lecture/tutorial (e.g. monitoring the chat for questions and technical issues). If you don't plan on having a moderator, you can leave this blank.

4. For events that repeat on a weekly schedule:

   - If the event happens once a week at the same time every week, select **Weekly** from the "frequency" dropdown.

   - Otherwise, select **Custom**, change "Repeat every" to 1 Week, and highlight the days of the week you want.

Custom Repeat Schedule

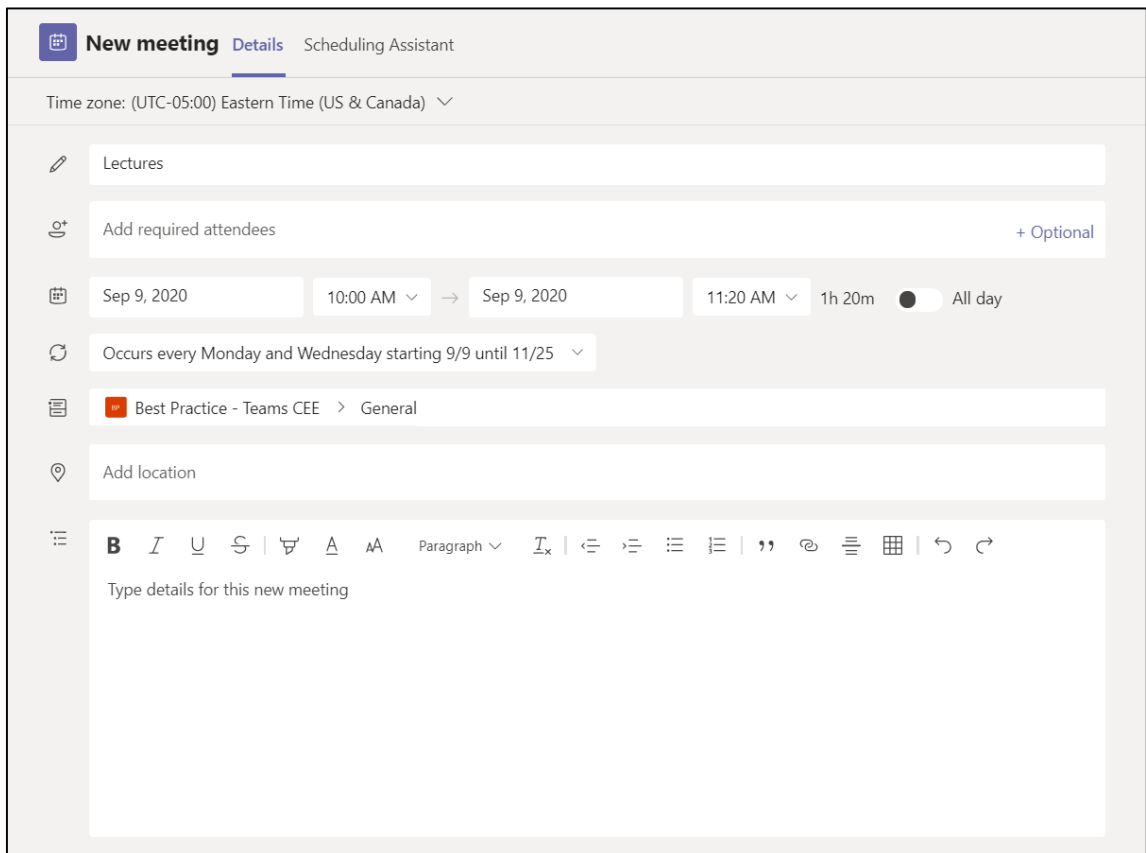Note: Make sure you associate the meeting with a channel (e.g. Lectures, Office Hours, etc.). This will help students find the right meeting, and also will better organize your course delivery (so it's easier if you need to refer to a previous lecture/tutorial for any reason).

Associating a Meeting With a Channel

5. Select **Send** to finish scheduling the meeting.

6. For lectures, it's a good idea to only let yourself present, so students don't accidentally (or deliberately) take control of the meeting. To do this, go back to the channel you posted the meeting in. In the notification for the meeting, select **More options** "**…**" on the right, and select **View meeting details**.

More options > View meeting details

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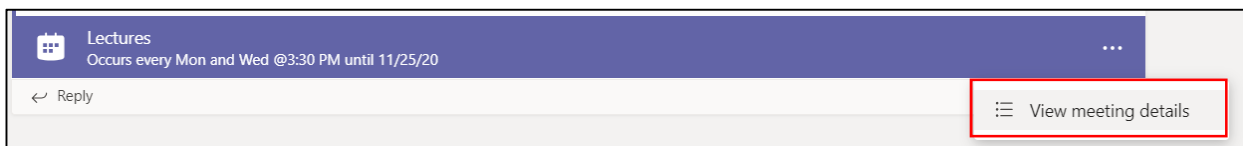
7. At the top, select **Meeting options**. This will open a in new tab in your browser (Chrome, Safari, Firefox, etc.).

Meeting options
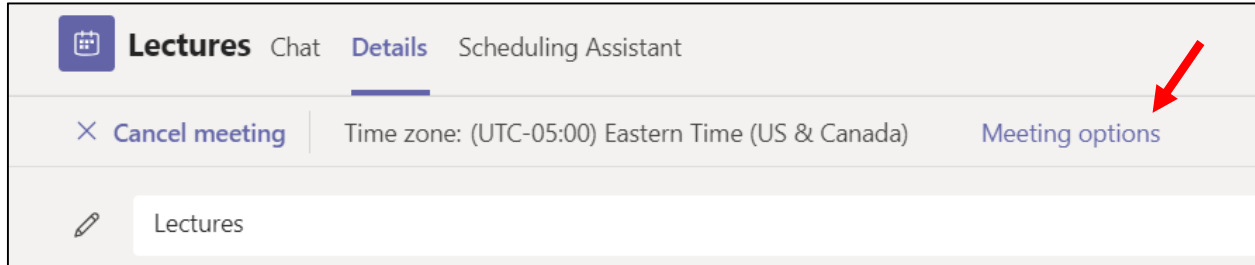
8. Change "**Who can present?**" from "**Everyone**" to "**Only me**", then select **Save.** You may wish to have a TA help moderate lectures/tutorials; in this case, you'll need to give your moderator more permissions. You can only do this after the lecture has started. When your moderator joins the lecture, find them in the **Participants list**, and select **More options** "**…**" to change their role to "**Presenter**".

"Who can present?" > "Only me"
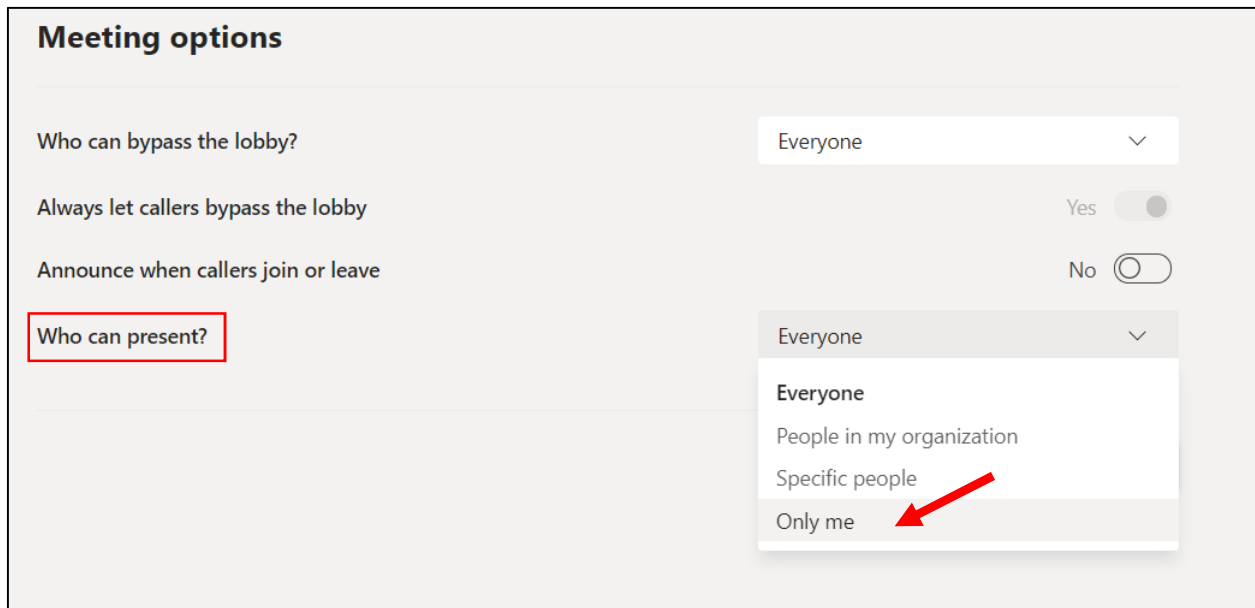
Recording Live Lectures/Meetings

1. Begin or join the live lecture/tutorial (refer to the steps above).

2. Start recording the live session by selecting **More options** "**…**" and then selecting **Start recording**.

> Note: All students in the live session will be notified when the recording has started. A notification will be posted in the chat history.
>
> Multiple recordings of the same live session cannot occur at the same time.

<p align="center">More options > Start recording</p>
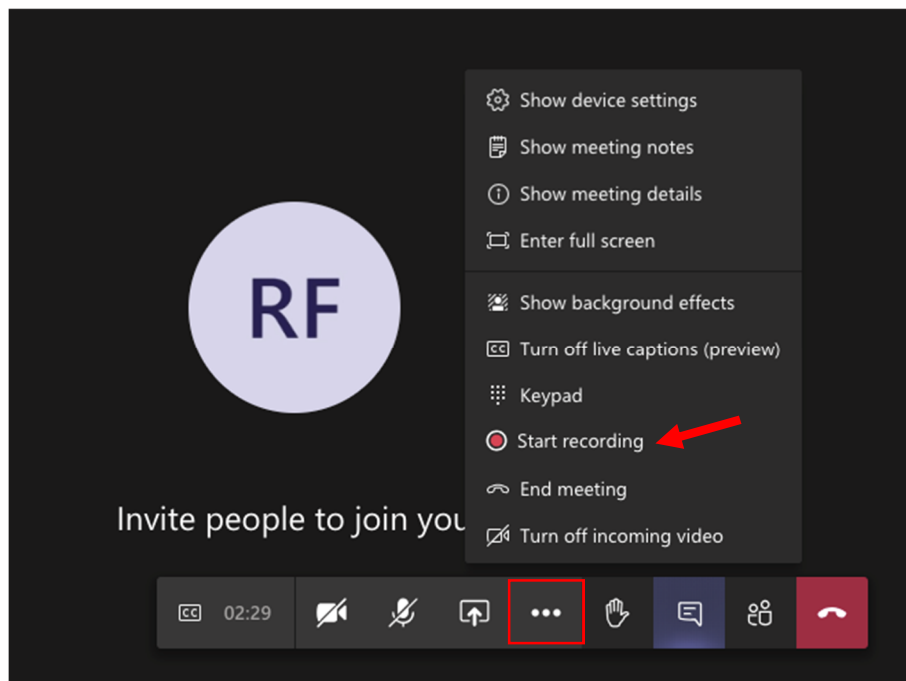
3. End a recording by selecting **More options** "**…**" and then selecting **Stop recording.**

Saving/Uploading the Recordings

1. Recordings will be processed and automatically saved to **Microsoft Stream** once they are ready to be played. The instructor/TA who started the live lecture/tutorial will receive an email from **MS Stream** when the recording is available (refer to **MS Stream** section).

Note: It may take a considerable amount of time for the recording to process and appear in **MS Stream**. Longer live session recordings will require more time to appear on **MS Stream**.

Other Important Notes:

- Recordings are automatically stopped once all participants have left the live session or after 4 hours of inactivity.

- Recording of the live session will continue even if the instructor/TA who began the recording has left. To end a meeting for all participants (rather than just leaving the meeting), go to **More options** "**…**" and then select **End meeting**.

- You must be the team owner/administrator in order to have recording privileges.

Functions Within Live Lectures/Meetings

Screen Sharing

1. Once in a live session, select the **Share** ⬆️ option from the meeting controls. Several options will appear for sharing. Select to present either the entire desktop, a specific window, a PowerPoint file or a whiteboard (refer to whiteboard section below).

    Note: Screen sharing is only available for the latest version of MS Teams or through teams on the web using Google Chrome.

Share

Desktop/Window/PowerPoint/Whiteboard
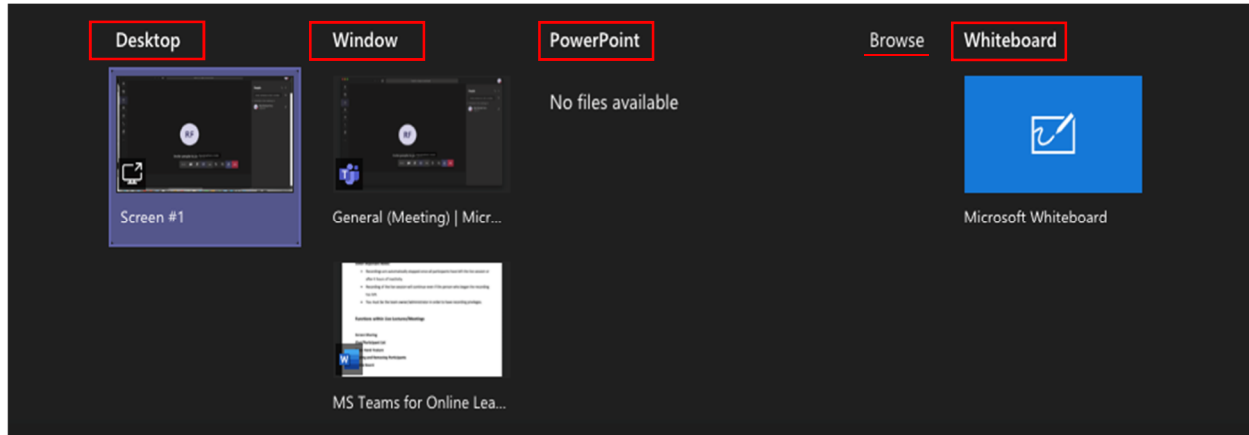
Desktop	Share entire screen/all windows, students will see what you see.
Window	Share one specific window, students will only ever be able to see what is on that window (ex. Google Chrome, Microsoft Word).
PowerPoint	Share a PowerPoint file that others may interact with.
Whiteboard	Share a virtual whiteboard which you can write on with your cursor or stylus (if supported by your computer/tablet).

2. To end screen sharing, select the **Stop sharing** option from the meeting controls.

Stop Sharing
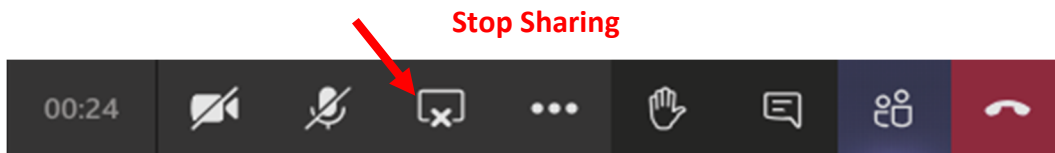
Note: Mac users will be prompted to change their privacy settings on the first screen sharing attempt using MS Teams. Simply select "**Open System Preferences**" and select the checkbox next to MS Teams in the setting panel.

System Preferences
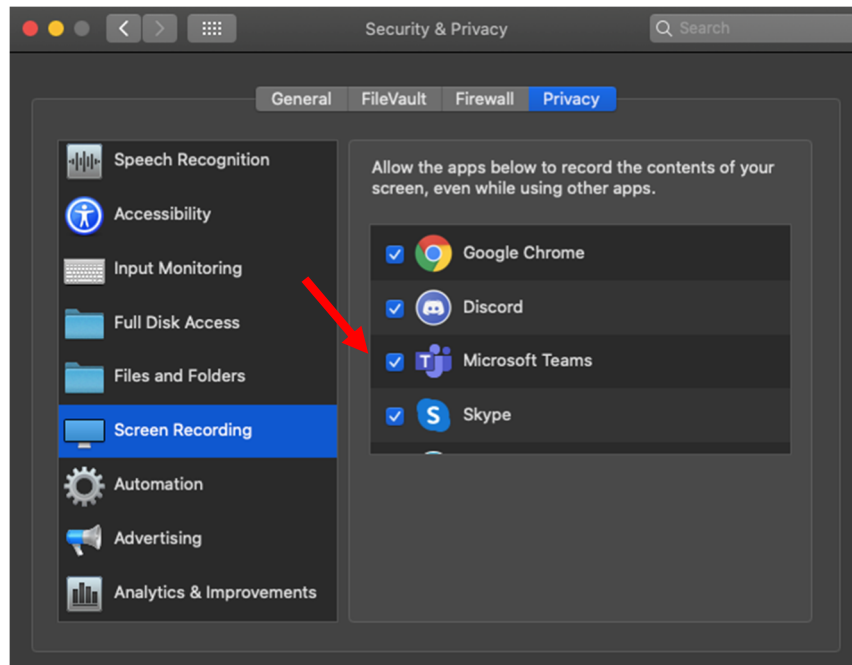
To give control of your screen to another participant, select **Give control** from the sharing toolbar located at the top of your screen. Select the name of the participant you would like to give control to. They will be notified and will now have control of your screen. At any point you may take back control by selecting **Take back control** from the sharing toolbar.

Other Important Notes:

- Sharing system audio is only available on Windows devices at this point. Mac users will not be able to share audio from video clips while screen sharing.
- Select **Browse** in the PowerPoint section to select a different file not included in the recent files view.

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Whiteboard

Whiteboard allows meeting participants to draw, sketch and write together on a digital whiteboard. This functionality is particularly useful for solving problems in real time or for having students show their work when solving problems in order to provide feedback.

1. After joining the live session, select the **Share** ⬆ option from the meeting controls.
2. Select the **Microsoft Whiteboard** option under the whiteboard section.

Share > Microsoft Whiteboard

Once the whiteboard has started, participants can begin to write and draw on it. Simply select the **Pen** icon and select a colour.


Note: At this point in time, whiteboards will not be included in live session recordings. Whiteboards can be accessed after meetings in the team meeting chat under the **Whiteboard** tab. If you wish to have live drawings or writing included in the recording, we suggest you share your screen while using a different mark-up platform.

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Other Useful Live Session Functions and Tips

Functions:

- Students have the option to "raise their hand" by selecting the **Raise hand** option form the meeting controls. The instructor/TA will be notified that the student's hand is raised.

Raise Hand
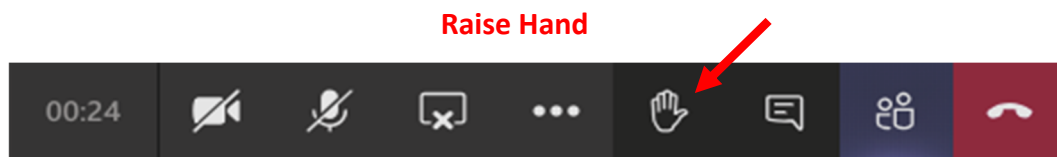
- Easily mute all students by selecting the **Mute all** button from the participant list. Mute individual students by selecting **More options** "**…**" next to their name and selecting **Mute participant**.

- Remove participants by selecting **More options** "**…**" next to the desired participant's name under the participant list and selecting **Remove participant**.

More options > Mute/Remove participant

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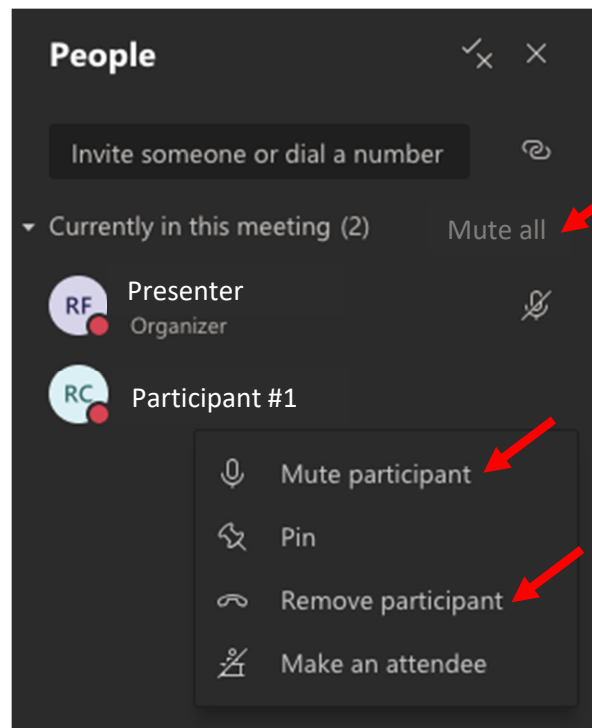
- Blur or change your background during a live session by selecting **More options** "**…**" and then selecting **Show background effects**. Select a background from the right-side menu and select **Apply**. You can change your background before a meeting by selecting **Background effects**, located to the right of the mic on/off switch, and then selecting your preferred background.

More options > Show background effects
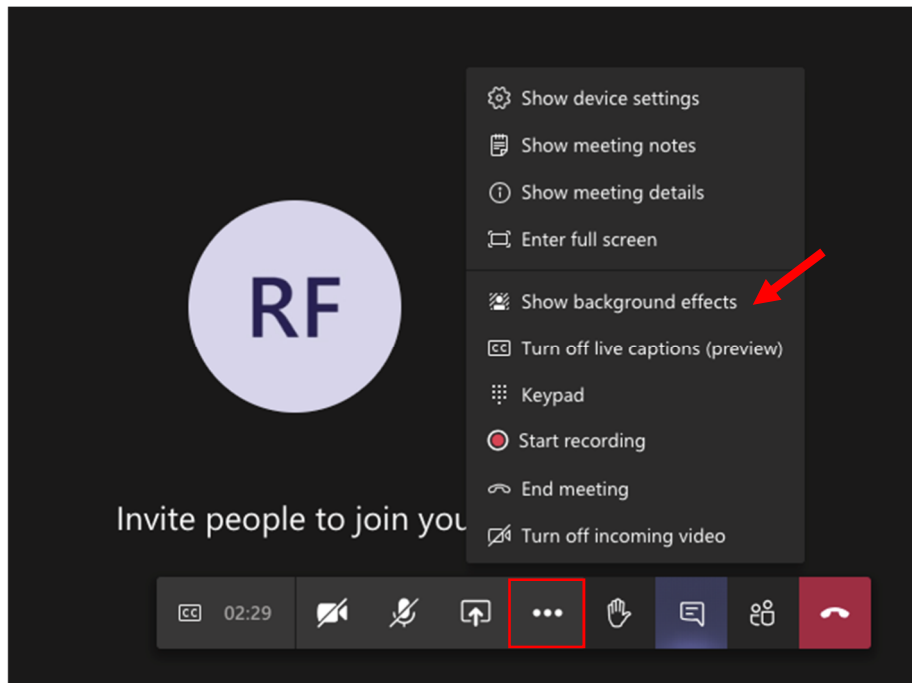
Tips:

- Keep in mind that the chat and participant list are not visible at the same time. To switch between the chat and participant list, select either **Chat** or **Participant list** form the meeting controls.

Chat/Participant list

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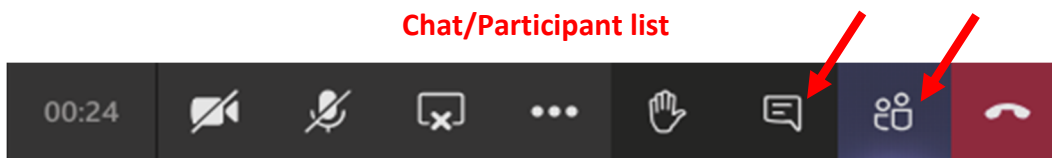
- By default, Teams will always present you the screen of the participant that is speaking, You can easily choose what you would like to view by selecting the video screen of that participant or piece of content.

- You can also pin various video screens so that regardless of who is talking, they will always be pinned to your view. Simply right select the video screen and select **Pin**.

- Teams is still usable during a meeting. Simply select outside of the meeting and you will be able to check other channels or chats while remaining able to be heard and seen by other participants. The meeting becomes minimized in a smaller window on screen, select the window to return to the meeting.

More options > End meeting
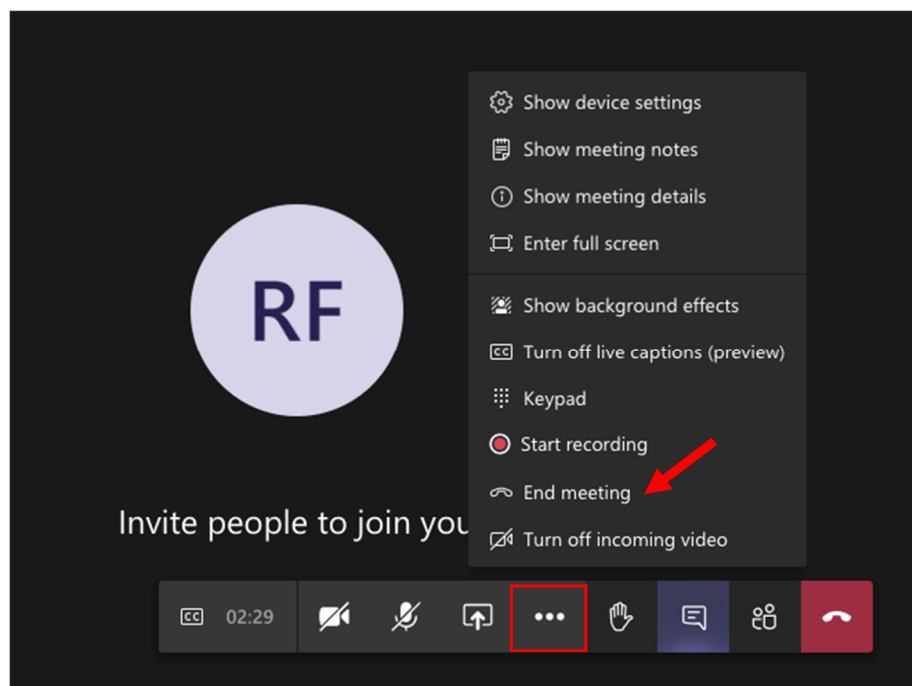
Microsoft Stream – The Basics

Microsoft Stream is a video service which is integrated with Microsoft teams. It can be used to upload, store, share and view video content/recorded live sessions. Recorded lectures or meetings will be automatically uploaded to **MS Stream** where it will be permanently stored, and the link can be shared with students. **MS Stream** make it easy for student to make comments on videos, save the link for future reference and consume the recorded lectures at their own pace.

## Accessing/Editing Recorded Lectures and Meetings

1. After ending the recording, the video recording will begin processing and is viewable in the chat (long recordings can take a considerable amount of time to process). Once it has completed processing, the video will be able to be played by selecting on the video in the chat.

   > Note: The presenter who started the recording will receive an email once the video has finish processing and is ready to be view on **MS Stream**.
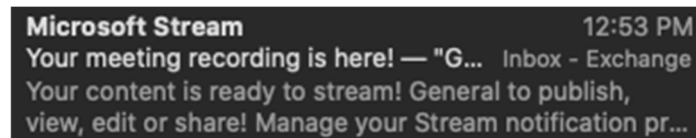
2. To open the video in **MS Stream**, select **More options** "**…**" then **Open in Microsoft Stream**. This will open **MS Stream** in your default browser (Chrome, safari, etc.) where its full functionality can be utilized.

More options > Open in Microsoft Stream
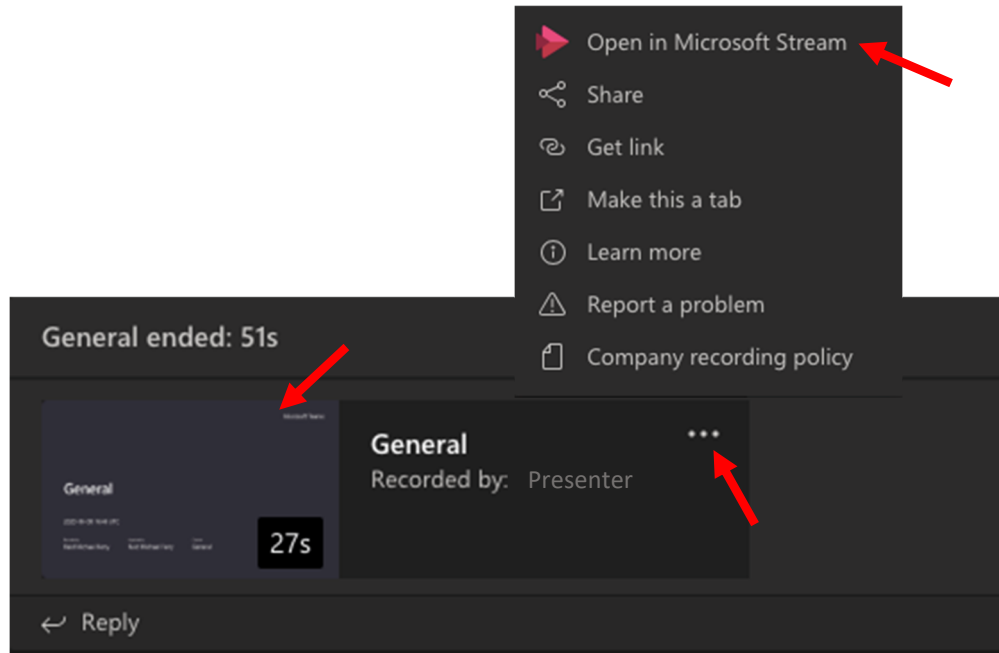
3. To access all videos, channels, groups, etc., select **My content** from the navigation bar and then select the type of content you are trying to view.

4. To edit video settings, select **My content > Videos**, all of your videos and recordings will be visible in a list format. Select **Update video details** (the pencil icon) next to the video you would like to edit. You can change the video name, add a description, change video permissions, add the video to your stream channels, turn off comments, etc.

Update video details

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Other Important Notes:

- Videos and video links in the chat will expire after 30 days, whereas they are permanently stored on **MS Stream**. Thus, it is important to ensure students have access to your stream channels where the videos will be located.

- Share **MS Stream** video links by selecting **More options** "**…**" then selecting **Share** next to the video.

- Trim **MS Stream** videos and recordings by selecting **More options** "**…**" then selecting **Trim video** next to the desired video.

- To share the recorded video with others who did not participate in the original meeting or who are not part of the MS Team, you must either give permission to those users or download the video and share it that way. Download a video by selecting **More options** "**…**" then selecting **Download video**.

- To upload external video content to **MS Stream**, select the **Upload video** button in the top navigation bar. You will be directed to upload a video file, select **Browse** to upload a file from your computer.

Channels In Microsoft Stream

1. To create a new channel in **MS Stream**, select **Create** and then **Channel** from the navigation bar.

2. A window will pop up where you can enter the channel name, description and group. You must select the MS Team which you would like to have access to that particular channel. Search the name of that team in the group search bar and select it. Once you have finished entering the channel details, select create.

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Note: Channels in **MS Stream** are not the same as channels in MS Teams. They serve similar purposes (to organize content and students) but they are not linked in any way (i.e. creating a channel on one platform will not create a channel on the other platform).

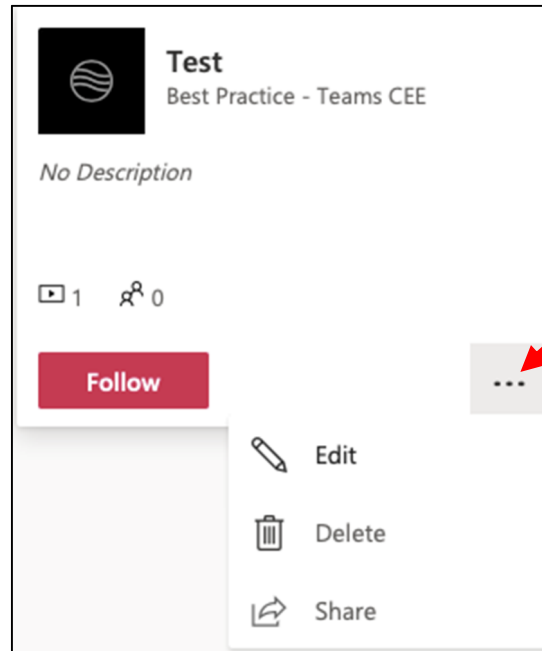**Create a channel**

3. To edit channel details or to delete a channel, select **My content > Channels**, then select **More options** "**…**" next to the channel you would like to **Edit** or **Delete**.
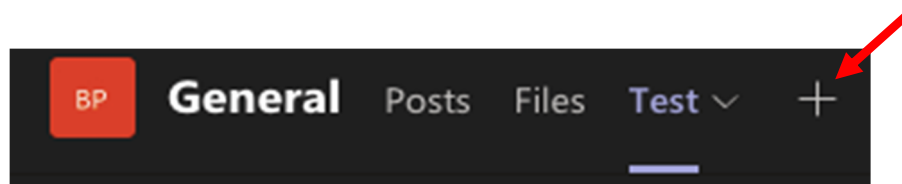
More options > Edit/Delete

Other Important Notes:

- It is advised to create multiple **MS Stream** channels to organize content. Lecturers may want to have a channel for lectures, tutorials, examples, etc.

- Instructors may add a link through teams directly to an **MS Stream** channel. Select the "+" on the top bar in Teams. Then select **MS Stream** and enter the name of the channel then select save.

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Link a Stream Channel in Teams

Stream

About   ✕

Search or paste a direct link to a Microsoft Stream channel

Search or head over to Microsoft Stream to grab a channel URL

Tab name

Channel

☑ Post to the channel about this tab   Back   Save

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