

Leitfaden zum digital teaching & learning an der TU Wien im Wintersemester 2020/21

- Introduction
- Outline of the 2020/21 winter semester
 - New students
 - Hybrid (mixed online and attendance) courses
 - Online courses
 - Attendance courses
 - Planning courses in TISS
 - Planning cohorts
- Communicating the course outline to students
- Examinations
- Study materials for students
- Student feedback
- Feedback to students
- Student engagement
- Student networking
- Distance teaching at TU Wien
 - Pre-Record and Discuss approach
 - Before the semester ...
 - During the semester...
 - Teach & Record (& Stream) approach
 - Recording option:
 - Streaming option:
- Recommended tools
 - TUWEL – The central tool for distance learning at TU Wien
 - LectureTube - Recording lectures in the lecture theatre and video on demand
 - LectureTube Live – Live streaming from the lecture theatre
 - Document camera – Recording real objects in the lecture theatre
 - TUpeerTube - TU Wien video platform, similar to YouTube
 - ZOOM – Online service for web conferences
 - Camtasia Studio – Software for recording screencasts as video
 - Snagit – Software for creating and improving screenshots
 - ARS Nova – Audience Response System
 - Microsoft Teams – Comprehensive collaboration tool, incl. audio/video chat
 - GoToMeeting
- Legal issues
 - Copyright publications
 - Legal issues: FAQ from the 'Forum Neue Medien in der Lehre Austria' association (Fnma)
- Barrier-free access
- Practical examples
- Online training and instruction
 - Central information pages on distance learning in coLAB
 - Distance learning good practice
 - Coronavirus webpage
 - Central webpage for room information
 - Support
 - Webinars
 - Excerpt from the offer:
 - Documentation and video instructions
 - Multimedia – Tutorials

Introduction

This guide is intended to be used by teaching staff as an online teaching manual for distance learning and hybrid learning at TU Wien. It defines recommendations as well as standards in digital teaching at TU Wien. It also documents the overall teaching process in the 2020 winter semester as well as providing a number of ideas and suggestions. Links to further information on the individual topics are provided in the relevant chapters. Different formats and teaching options will be available in the coming semester.

This necessitates the definition of some new concepts:

Course format: a distinction is made between three basic formats. The course format refers to the primary form in which a course is conducted. For example, if a course includes occasional online events (e.g. preliminary discussion, online consultation), but attendance is required at all others, attendance remains the basic format. The examination format of a course may differ from the implementation format and must be indicated separately in the course description.

The room reservation screen in TISS will be adapted and an extension of the course notification will be added as a mandatory field. The 'Methods', 'Learning outcome' and other points will be joined by an additional point that contains the course format via a dropdown selection (hybrid, attendance, distance learning).

This is primarily intended to provide clarity for students, but also to enable an evaluation of quality management in the area of teaching. An icon similar to the STEOP flag is also planned and will be implemented during August.

- **Hybrid teaching:** Hybrid teaching describes a format that combines attendance and online formats. This can take place in two ways:
 - Due to the limited room capacities, some of the students attend TU Wien in person, while the remaining students attend via live streaming from home and/or receive recordings of lectures online. This may involve a fixed breakdown into cohorts, one of which always attends and the other of which is always online, or the cohorts can alternate their attendance. However, this must comply with the regulation in place across TU Wien. Details on the cohort regulation can be found under point [2.6 Planning cohorts](#)
 - A form of 'blended learning' in which, for example, parts are entirely attendance-based and others are held entirely online. These phases then alternate at varying frequencies.
- **Face-to-face teaching:** In face-to-face teaching, courses are predominantly held on-site at TU Wien. This mode does not contain any distance learning. In the winter semester this mode is restricted due to the limited capacities in certain areas.
- **Distance learning:** Distance learning describes a course that is exclusively conducted in an online format.

Cohort management: Division of course participants into groups with registration and alternating attendance dates. Please note that the basic idea behind the cohort regulation is that the same cohort of students will attend TU Wien for all lectures on a certain day. This requires a standard regulation, which is detailed in [2.6 Planning cohorts](#).

It also needs to be noted whether a lecture or examination is synchronous or asynchronous, which obviously has an effect on the type of opportunity for preparation. The most suitable format for the relevant course also depends on the expected number of participants.

Outline of the 2020/21 winter semester

When planning the 2020/21 winter semester, distance learning must necessarily be used wherever possible so as to be able to complete the course in full despite the significantly reduced room resources.

As a result, all courses for which the distance learning format can be used must be converted accordingly where possible. The Vice Rector's Office for Study and Teaching will provide support in the form of a [lecture for tutors](#) to convey the skills required to create teaching videos and the possibilities for implementing distance learning, while support with the adaptation of courses will also be provided by a central body. Recordings of lectures in lecture theatres via LectureTube are already possible and recommended in the summer.

It must also be noted that the safety measures may need to be tightened during the summer months or during the semester. There is the possibility that a complete switch to distance learning may be required.

New students

A key goal is to enable **new students** to make a positive start to university life at TU Wien despite the circumstances. As a result, wherever possible, course units for first-semester students will be held in hybrid formats, which combine attendance and online events. The intention is to give new students the opportunity to get settled at TU Wien and network with each other.

The necessary time for cleaning and disinfection between the individual lecture times in a lecture theatre, when changing student groups, must also be taken into account. To minimise the number of necessary room changes, the "**semester lecture theatres**" system will be used across the board for Bachelor's courses in the first semester. This will give the new student cohorts a fixed lecture theatre, the semester lecture theatre, for their lectures. The abbreviation of the specific course has been added to the affected rooms in TISS for the sake of clarity. However, for teaching staff, this means that, for this winter semester, the rooms for holding lectures and possibly also the times may change slightly compared to the previous year.

These Bachelor's course lectures will be coordinated by the timetable coordinators as part of the [room booking process](#).

The following rule applies for all other lectures for which attendance is required, in order to make the best possible use of the available room resources: Attendance events must only be scheduled in exceptional cases where an urgent requirement exists. The Dean of Studies must approve the holding of the face-to-face teaching event. In principle, the following applies: No attendance events can be approved for courses without the consent of the Dean of Studies.

Hybrid (mixed online and attendance) courses

Courses in which attendance events (apart from examination dates, as the examination format is defined separately) need to be held may be held as hybrid courses with the consent of the responsible Dean of Studies. In this case, the course manager needs to notify the Dean of Studies of the relevant course. If the Dean of Studies consents to the hybrid format, the central teaching room manager is informed so that the required attendance dates can be released. In principle, the following applies: No attendance events can be approved for courses without the consent of the Dean of Studies.

Different teaching concepts are described in chapter [10 Distance teaching at TU Wien](#).

Online courses

As was the case in the 2020 summer semester, the majority of the teaching will make use of the online format. This aims to reduce the physical attendance of students at the TU campus such that attendance events for courses as well as examinations can be offered in compliance with the safety requirements despite the considerably reduced room capacities due to the distancing rules as well as the restricted availability of rooms due to the necessary cleaning measures.

The central tool for online teaching at TU Wien is TUWEL. LectureTube and LectureTube Live are available for recording and streaming lectures. An up-to-date [room list](#) with the necessary equipment is provided in coLAB.

In general, the use of Zoom is recommended for live transmission or recordings outside of TU rooms equipped for LectureTube.

Different teaching concepts are described in chapter [10 Distance teaching at TU Wien](#).

Attendance courses

Courses that are planned as full attendance courses as well as hybrid courses must be reported to the Dean of Studies. Courses may only be held as full or partial attendance courses with the approval of the Dean of Studies.

The criteria for attendance courses include:

- Special equipment (laboratory, IT etc.)
- Activities that are demonstrably not possible online or only with considerable didactic restrictions (e.g.: model making, computer exercises)
- Activities that are only possible as a group (e.g.: teams of two, mutual supervision/protection)

- Supervision by TU Wien personnel is necessary

In principle, the following applies: No attendance events can be approved for courses without the consent of the Dean of Studies.

Planning courses in TISS

From the 2020 winter semester, courses can be defined as online/hybrid/attendance in TISS. This is intended to facilitate communication with students and to make it easier to assess the resources required for the online offers (e.g. LectureTube) as well as the necessary room resources. All events planned for a course, which are held in any kind of live format – irrespective of whether as attendance or online – must be entered so that they appear in the timetable view in TISS for students.

The timetable view in TISS can be accessed by selecting the relevant course in the course offer in TISS to display the curriculum. There you can switch to a [semester view](#). A timetable, which displays all (live) dates for all lectures announced for this semester in TISS, can now be displayed for every semester. This view aims to make it easier to plan lectures without overlaps.

When creating an event in TISS there is the option of selecting the format in which this event will be held: attendance, hybrid or distance learning. The option of whether a room is or is not required can then be selected for each of these variants (as already explained in the introduction to this document) Please note: If LectureTube dates are required, these must be requested separate to the room bookings! This takes place under the E-Learning tab and is only possible once the room has been approved.

Planning cohorts

The division of students into cohorts is recommended for courses whose participants exceed the reduced number of places in the relevant lecture theatres. This can be displayed via groups in TISS. The following rule must be noted when dividing course participants into cohorts: To allow students to plan, the cohorts must be the same for all lectures in a semester.

Depending on the number of participants, at least three groups are required:

- one group for the cohort for even calendar weeks (1 October 2020 is in an even calendar week, i.e. the semester starts with the even cohort)
- one group for the cohort for odd calendar weeks
- as well as a third cohort for participants who can only participate in the course online as they, for example, belong to an at-risk group or are located abroad

If several cohorts need to be formed, the number of groups needs to be increased accordingly. But, in this case, it must be remembered that in the above example, students can already only participate in face-to-face learning every two weeks. An increase in the number of groups would therefore also result in considerably fewer attendance events for students. The time and effort required for arrangements within the individual courses to ensure a matching number of days of attendance for students would also increase significantly.

Another example would be if two semester lecture theatres are provided and lecture theatre A streams to lecture theatre B. This would allow for a higher number of groups in order to increase capacity:

- one group for the cohort in lecture theatre A for even calendar weeks (1 October 2020 is in an even calendar week, i.e. the semester starts with the event cohort)
- one group for the cohort in lecture theatre B for even calendar weeks
- one group for the cohort in lecture theatre A for odd calendar weeks
- one group for the cohort in lecture theatre B for odd calendar weeks
- one group for online participants

The block function in TISS can be used for lectures with varying group sizes. For a course with exercises, this would allow the groups for the lecture part and the groups for the exercise part to be combined into blocks. In this case, students can then register for precisely one group per block. Details are provided in [TISS Help](#).

Communicating the course outline to students

Depending on the format used for a course for the 2020/21 winter semester, the relevant information will need to be promptly adapted in the course description in TISS and the relevant format selected. The methods used must be announced as soon as possible – but at least 2 weeks before the start of the course – to give students the best possible opportunity to prepare. Students should be clearly informed of the planned online phases and, in particular, also of what is expected of them. When planning the course, it is important to note that the student self-study workload will increase considerably in a course. The learning outcomes for the self-study phases may need to be adapted.

In principle, the following applies:

- All course dates are set at the start of the semester and are communicated via the course webpage in TISS, where a distinction is made between online and attendance events.
- A TUWEL course must be set up before starting the course.
- All materials for the course are provided in TUWEL.
- A transparent overview of the examination modalities and the assessment criteria must be communicated in the course page in TISS before the course even starts.

It is particularly important that a fixed channel for communicating with students is defined. As TUWEL is used as the central tool for online teaching at TU Wien, we recommend that teaching staff also use this tool as the primary channel for communication. A standard tool significantly reduces the associated time and effort for students and teaching staff. This does away with the need to check multiple channels simultaneously and therefore also prevents the risk of not receiving relevant information, or receiving it too late.

Further details on the options available in TUWEL are provided on the [coLAB webpages on TUWEL](#).

Examinations

Examination dates must be announced at the start of the semester in TISS. Three dates must be offered per semester. A transparent overview of the examination modalities and the assessment criteria must be communicated in the course page in TISS before the start of the course, as is the case for the planned examination format (online or attendance).

The lecture theatre capacities are coordinated and adapted with the Rector in line with the applicable regulations and requirements. The latest information, including the lecture theatre plans, can be accessed on the [coLAB pages on room information](#).

The use of online examinations is recommended.

Examinations, especially major examination dates, can – if an online examination is not possible or appropriate (see [Guide for holding online examinations](#)) – be offered as attendance examinations and must be held in line with the latest version of the [Guide on holding attendance examinations](#).

Study materials for students

A broad range of options are available for conveying learning content to students. The choice of different tools/learning materials is just as broad and lets you individually adapt the online teaching to the specific course requirements.

The following provides a list of the most important formats for learning content:

[Lecture recordings](#) (recommended tool: [LectureTube](#))

They can be recorded in the current semester, but can also be provided from a previous semester if the content has stayed the same.

If recordings are planned in classrooms at TU Wien, given the limited room resources in the winter semester, we recommend preparing the recordings in the summer.

We also recommend making the recordings available for an extended period of time to allow students to take another look prior to examinations.

[Live streams](#) (recommended tools: [LectureTube Live](#) and [ZOOM](#))

As already noted under the lecture recordings point, we advise recording the live streams and subsequently making them available to students, such as via TUWEL.

[Recorded presentations](#) (recommended tool: [Camtasia Studio](#))

This format is very similar to the lecture recordings, but can also be used to record much shorter presentations, which cover a specific topic and provide more detailed content in addition to a lecture recording.

[Lecture notes](#)

These can be bundled together with the relevant formats and provided in TUWEL.

Besides these 4 main formats, a number of others have also received positive feedback from students:

- Podcasts
- Transcripts
- Examination papers
- Open Educational Resources (OER)
- Massive Open Online Courses (MOOCs)

Irrespective of this, the two following guidelines are essential for the successful use of the relevant formats:

- Accessibility of the learning content for students (a central point for all content and interface to other [TUWEL](#) tools), as learning content that is difficult to find may only be used by some of the students.
- If too much content is provided, students may feel 'overwhelmed' by the amount of information. In this case, marking the essential content to distinguish it from the rest is useful.

One outcome of the student survey in SS2020 was that students would prefer to have more varied documents tailored to distance learning. For instance, not just the solutions to tasks, but also the path to the solution should be provided. Another outcome was the clear desire to have a form of personal interaction with the teaching staff over and above the provision of documents.

Student feedback

Student feedback is essential for recording the mood of students and make a general assessment of the new method of teaching. We recommend obtaining student feedback, particularly at the start of the course, on the structure, implementation and communication of the course and the materials provided in order to make any necessary adjustments. For example, a quick option would be the use of an audience response system (recommendation: A RS Nova – Audience Response System, [onlineTED](#) or [frag.jetzt](#)) during a live event to obtain quick and concise feedback.

An opportunity for students to provide feedback during the course of the semester must always exist. A simple feedback forum in the TUWEL course is ideal for this purpose. The following links provide detailed instructions on the use of the relevant functions in TUWEL:

- For student questions and answers, the Forum (instructions: as [video](#), as [cheat sheet](#))

Alternatively, recurring surveys can be conducted on specific topics.

- For surveys to gauge opinions, the Feedback (instructions: as [video](#), as [cheat sheet](#))
- For short opinion polls, the Poll (instructions: as [video](#))

Feedback to students

It is important to maintain constant contact with students so as not to lose them. Feedback on learning progress in online consultations or online self-assessments is particularly important. This lets you monitor the learning progress to adapt the speed of the course or to repeat contents, where necessary. Communication is a critical tool for (learning) success in every course. Clear, unambiguous and comprehensible communication using a communication channel of which students have been notified early on is strongly recommended. The central learning platform, TUWEL, provides a range of useful tools for precisely this purpose. Bidirectional and unidirectional as well as anonymous communication and feedback options are available.

Teaching staff can choose from a range of tools in **TUWEL**:

- For announcements, the Message Forum (instructions: as [video](#), as [cheat sheet](#))
- For student questions and answers, the Forum (instructions: as [video](#), as [cheat sheet](#))

- For surveys to gauge opinions, the Feedback (instructions: as [video](#), as [cheat sheet](#))
- For short opinion polls, the Poll (instructions: as [video](#))
- For consultations, brainstorming sessions, short revision sessions, the Chat (instructions: as [cheat sheet](#))

Tip: Encourage students to compile contents themselves under the motto: Students helping students:

- via Wiki (instructions: as [cheat sheet](#))
- set up a separate forum

Another tip: The forum should be moderated in order to correct incorrect responses. The use of [TUchat](#) has also established itself in this respect.

Student engagement

One of the key factors of student engagement is interaction – holding discussions with students. In digital online formats this is a task that demands good planning and preparation.

One method of interacting with students is the use of polling systems ([onlineTED](#), [frag.jetzt](#) or Classroom Response System) to gather spontaneous and up-to-date feedback. This is particularly beneficial at the start of a block of lectures in order to gain an overview of the level of knowledge, which can then be immediately utilised.

Another method is the use of breakout sessions in order to organise short activities and group work.

Asking if there are any questions or unclear points at the end of a block of lectures can also be useful for obtaining an overview of whether it may be necessary to go back over certain content. Audience response systems or even the chat function have proven effective in this case.

In general, we advise making a (moderated) discussion forum on the courses available in TUWEL.

Many teachers have found the 'Activity support' TUWEL activity to be very helpful in this respect. This tool helps teaching staff follow the course activities.

They can access information on the use of any study materials or activities and so keep a constant eye on the student cooperation. The activities are displayed anonymously and cumulatively for the entire course. Further information on this topic is provided in the associated [cheat sheet](#).

The focus:lehre Team offers all teaching staff [online resources](#) on the topics of 'Motivating students online' as well as 'Structuring self-learning phases to support learning'.

Student networking

Student networking is an important factor for learning success. It is therefore recommended that teaching staff suggest that students set up learning groups and opportunities for exchange themselves as part of their course. Students do not always find the TUWEL course, as a virtual room for this type of exchange, to be optimal, as there is a reluctance to participate in informal learning in front of the prying eyes of the teaching staff. But teaching staff can explicitly encourage students and set aside a bit of time during the course so that students can establish these kinds of opportunities for exchange, e.g. on platforms popular amongst students, such as Discord, Facebook, WhatsApp, Telegram, forums etc.

The offers provided by the student bodies of the relevant faculties can also support student networking.

Distance teaching at TU Wien

Pre-Record and Discuss approach

In this approach, teaching is structured similar to the flipped classroom principle. In this case, a [lecture theatre equipped with LectureTube](#) is booked in the summer months before the start of the semester and the lecture contents are recorded without an audience. Wherever possible, these contents are structured to enable better referencing during the actual teaching period.

Before the semester ...

The TUWEL course should be set up for the course even before the start of the semester (see [Guide to announcing a TUWEL course](#)) and the recorded contents structured as weekly/regular self-learning phases in TUWEL. Short knowledge checks (quizzes, H5P), short tasks, questions based on the learning objectives etc., can also be prepared. These can then be released manually or on fixed dates during the semester (with the [TUWEL prerequisites](#)). TUWEL instructions can be found in the [TUWEL Tutorials course](#).

As an alternative to recording with [LectureTube](#), a screen recorder (recommendation: [Camtasia](#), [Snag-It](#), [OpenBroadcaster Software](#)) can be used to locally record and edit the units before uploading them on the [TUpeerTube](#) platform. Contents can naturally also be structured entirely without video, for example with activities and study materials that are provided in TUWEL, such as a [text page](#), [book](#), [lesson](#) etc. The TUWEL update in the autumn of 2020 will also make H5P available, which is a powerful tool for creating interactive learning elements. An [info event](#) is planned for this purpose.

During the semester...

... weekly/regular discussion units on the produced contents will be offered to go over and discuss these contents or respond to questions/uncertainties.

In attendance option 1: Held in tranches in the lecture theatre/seminar room (cohort regulation)

In attendance option 2: In parallel rooms with live streaming, including accompanying feedback option. In this case, it must be noted that a supervisor must be in attendance to monitor compliance with the safety measures in the second room.

Hybrid: During an attendance event, provision of a parallel web meeting (with connected lecture microphone or boundary microphones in small rooms, but not in LectureTube lecture theatres; we advise against the parallel use of LectureTube and web meetings), incl. additional assistance for moderating/supervising the web meeting.

Distance learning: The use of web meetings, such as Zoom or GoToMeeting

Irrespective of the format, we recommend providing a supervised and moderated discussion format in the TUWEL course for the course. This gives you the option of answering questions on an asynchronous channel (and, where applicable, also posing questions to stimulate the student discussion).

Teach & Record (& Stream) approach

In this approach, the lecture is held during the semester 'as per usual' (only with a significantly reduced number of participants) and the lecture units are recorded. Alternatively, a [live stream](#) can be offered for recording. However, greater demands exist with live streams (technical requirements and due to the setup as well as monitoring of synchronous feedback channels), while students generally also prefer on-demand recordings compared to live streams, as recordings can be consumed at any time and at the student's own pace of learning. Experience shows that live streams tend to be more suited to courses in which direct interaction with students is desired – e.g. revision sessions before exams.

The recording and streaming options vary depending on the room situation:

Recording option:

In attendance (in the LectureTube lecture theatre): Independent programming of the recording via TISS in line with the [instructions](#) and automatic recording in the lecture theatre. Particular attention should be paid to a punctual start as well as a punctual end. A list of LectureTube-supported lecture theatres is provided [on the room information page](#).

In attendance (own room): For instance, a laptop can be used to record the contents during a lecture with a screen recorder (our recommendation: [Camtasia](#), [Snag-It](#), [OpenBroadcaster Software](#)). The recordings can then be uploaded to [TUpeerTube](#).

Hybrid or distance learning: Besides the same recording option as is available in attendance, there is also the option of using the recording function in the web meeting tool. Two approaches are available:

- *Local recording on the computer (GoToMeeting and Zoom):* This records the meeting room or the released screen contents (slides, desktop etc.). The recordings can then be uploaded to [TUpeerTube](#). This option should be given preference to the following alternatives, cloud recording.
- *Cloud recording (zoom only):* Recordings of the meeting room or the released screen contents (slides, desktop etc.) can be stored on the Zoom cloud servers for 60 days (with extension option). When using this approach, the use of the TUWEL zoom activity is strongly recommended, as the recordings are then available directly in the context of the meeting room. If you have any further questions, please contact the TUWEL Team at support@tuwel.tuwien.ac.at.

Streaming option:

In attendance (in the LectureTube lecture theatre): The live streaming is started and stopped in the lecture theatre. The lecture theatres that support live streaming are listed on the [room information page](#). The following options are available for playing the live streams:

- *(In attendance) Rendition in a second LectureTube lecture theatre:* An assistant is required for the second lecture theatre, who starts the system in the lecture theatre and selects the correct rendition channel for the source lecture theatre stream. Please note: The LectureTube Team must be informed in good time in advance: support@lecturetube.tuwien.ac.at. In future, you will be able to find the lecture theatre configurations, the lecture theatre that can be used for streaming to other rooms, on the [room information page](#).
- *(In attendance) Rendition in any room/lecture theatre:* A video player must be set up in the relevant TUWEL course in line with the [instructions](#). For example, the assistant can use a laptop to project this video player using a projector in any room. Please note: Good audio must be ensured, screen savers and pop-up messages must be disabled and the laptop's energy options adapted.
- *(Distance learning) TUWEL video player:* A video player must be set up in the relevant TUWEL course in line with the [instructions](#). This allows students to follow the live stream online. We recommend restricting the availability of this video player via the TUWEL prerequisites in line with the [se instructions](#).
- *Hybrid:* A combination of the above methods can also be used in parallel to create a hybrid playback system.

In attendance (own room): For example, a laptop can be used to transmit the contents of the computer to a streaming portal (e.g. YouTube) during the lecture using the [Open Broadcaster Software](#) tool. Similar to the above option, the following options are available for implementation and rendition:

- *(In attendance) Rendition in any room/lecture theatre*
- *(Distance learning) TUWEL video player*
- *Hybrid*

If you have any questions, please contact the LectureTube Team in good time at support@lecturetube.tuwien.ac.at.

Please note that this option is technically as well as organisationally time-consuming and complicated, and the time and effort (set up and implementation) must be managed by the lecturers themselves.

Hybrid: During an attendance event, a parallel web meeting (with connected lecturer microphone or boundary microphones in small rooms) is provided, incl. additional assistant for moderating/supervising the web meeting.

Distance learning: Held via web meetings, such as Zoom or GoToMeeting

The recordings/live streams or web meetings are linked with the TUWEL course. Ideally, these elements are enhanced with/linked to further TUWEL activities and/or study materials in the course. In case of questions, the TUWEL Team would be pleased to offer support via the Ticket Line support@tuwel.tuwien.ac.at

NOTE: An accompanying feedback option should always be provided with a live stream. Either a supervised or moderated [TUWEL forum](#) for questions with permanent logging and access (tip: the questions can also be gathered in the lead-up in the forum) or an audience or student response system, such as [onlineTED](#), [frag.jetzt](#) or Classroom Response System.

NOTE 2: Please note that the parallel use of LectureTube as well as web meetings in LectureTube lecture theatres is not recommended, as this generally requires additional technical equipment for audio as well as greater moderation effort.

Recommended tools

TUWEL – The central tool for distance learning at TU Wien

The Distance Learning Team recommends the use of [TUWEL](#) (the learning management system based on the Moodle open source software) as the central tool for the courses. This platform lets you manage a wide range of tasks in the field of face-to-face teaching, distance teaching and hybrid formats. TUWEL can be ideally used for the following activities and should be used from the 2020/21 winter semester:

- Communication with students (bidirectional and unidirectional)

- Provision of learning materials (lecture recordings, lecture notes etc.)
- Checking the learning progress (online tests)
- Central point for linking other, complementary teaching tools

More detailed information can be found on the relevant coLAB page: [TUWEL](#).

LectureTube - Recording lectures in the lecture theatre and video on demand

This tool lets you record lectures in the lecture theatre as per usual and then subsequently make these available to students via TUWEL. The benefits lie in the familiar environment and the technical equipment in the lecture theatres (panel, presentation). The integration in TISS allows lecturers to independently create weekly events and programme recordings. Please note: A prerequisite for this is the prior approval of the relevant room reservation.

- Recording lectures as per face-to-face teaching
- Video available on demand via TUWEL
- Can be used over several semesters as long as the course content stays the same

More detailed information can be found on the relevant coLAB page: [LectureTube](#).

Comment: The group of users with access to the video recordings can be adjusted in 3 stages.

LectureTube Live – Live streaming from the lecture theatre

This LectureTube option is based on the principles described above and merely represents a real-time version of the tool.

- Live streams directly from the lecture theatre
- Additional recording and video on demand is possible

More detailed information can be found on the relevant coLAB page: [LectureTube Live](#).

Document camera – Recording real objects in the lecture theatre

Further to LectureTube and LectureTube Live, the document camera provides the option of presenting real objects or hand-written digressions in the lecture theatre. This allows practical examples, physical models and other material objects to be integrated into the lecture. Please note: A document camera is not available in every lecture theatre. An updated [list of rooms, including equipment](#), is provided in coLAB.

- Integration in lectures in the lecture theatre via LectureTube
- Presentation of real objects

More detailed information can be found on the relevant coLAB page: [Document camera](#).

TUpeerTube - TU Wien video platform, similar to YouTube

This tool is used to provide internal learning materials in video form. The structure is similar to the YouTube video platform. It lets students access independently created videos and recordings in an internal area. The simple integration into TUWEL makes this tool a good alternative to LectureTube, if attending the lecture theatre is not desired or is not possible – e.g. if no capacities are currently available in the lecture theatres.

- Video platform for own recordings and videos
- Easy integration into TUWEL
- Alternative to LectureTube

More detailed information can be found on the relevant coLAB page: [TUpeerTube](#).

Comment: Videos that are available on TUpeerTube are publicly accessible, if the link is known. At the moment there is no technical option for restricting access to a closed user group.

ZOOM – Online service for web conferences

The [ZOOM](#) tool is recommended for holding live lectures. To date, Zoom has been the most impressive of the web conference tools that are available. Besides the ease of use and the good accessibility, ZOOM also offers excellent voice and video quality.

- Web conference tool
- Recordings possible
- Integrated operation in TUWEL
- User group can be restricted in TUWEL

More detailed information can be found on the relevant coLAB page: [ZOOM](#).

Camtasia Studio – Software for recording screencasts as video

This tool provides the option of creating and editing recordings that will, for example, subsequently be made available on TUpeerTube. From simple screenshots through to the picture in picture function – this tool lets you create videos and add sound entirely at your discretion.

- Recording teaching units (such as lectures, exercises etc.)
- Option of adding audio to PowerPoint slides

- Option of recording screen content with audio

More detailed information can be found on the relevant coLAB page: [Camtasia Studio](#).

Snagit – Software for creating and improving screenshots

Snagit is a software for creating and improving screenshots. It also lets you include invisible scroll areas of a browser window in the photograph. It provides options for using screenshots to create your own presentations.

- Recording screen contents
- Create photo, video or audio recordings of desktop contents
- Integrated annotation of screenshots

More detailed information can be found on the relevant coLAB page: [Snagit](#).

ARS Nova – Audience Response System

The ARS Nova tool facilitates interaction between an audience and a lecturer in web conferences. This feature is currently in a test phase at TU Wien.

- Audience questions
- Interposed questions and feedback
- Evaluation questions

More detailed information can be found on the relevant coLAB page: [ARS Nova](#).

Tip: This page also contains alternative tools to ARSnova, such as [onlineTED](#) or [frag.jetzt](#).

Microsoft Teams – Comprehensive collaboration tool, incl. audio/video chat

This tool is not limited to web conferences, it also offers a range of options for collaborating in small or larger groups. In addition, MS Teams can be used as a cloud service, as it is compatible with numerous renowned cloud services. The large number of plugins means that MS Teams can be expanded as necessary and converted into a truly powerful and customised tool.

- Web conference tool
- Collaborative working possible
- Cloud services
- Integration of numerous plugins possible

More detailed information can be found on the relevant coLAB page: [Microsoft Teams](#).

GoToMeeting

GoToMeeting makes it possible to quickly, easily and reliably hold video meetings. But please be aware that GoToMeeting is not entirely barrier-free.

- Web conference tool
- Recordings possible
- Collaborative meetings with whiteboards for discussing artefacts, such as sketches, drafts etc.

More detailed information can be found on the relevant coLAB page: [GoToMeeting](#).

Legal issues

Copyright publications

When using external content in teaching, especially in online distance learning, attention must be paid to copyright issues. The following publications can be used as a guide:

[Urheberrechtsfragen beim Einsatz von Multimedia an Hochschulen – Ein Leitfaden für die Praxis am Beispiel der Universität Wien \[Issues relating to copyright when using multimedia at universities – a practical guide using TU Wien as an example\]](#) Dr Seyavash Amini & Prof. Dr Nikolaus Forgó, Vienna 2009

as well as the following, which is based on these elaborations:

[Lehren mit \(digitalen\) Medien – Ein Leitfaden durch das Urheberrecht für die Praxis \[Teaching using \(digital\) media – a guide to copyright in practice\]](#) Dr Seyavash Amini & Andreas Huß, Vienna 2017

Legal issues: FAQ from the ‘Forum Neue Medien in der Lehre Austria’ association (Fnma)

TU Wien’s membership in the ‘Forum Neue Medien in der Lehre Austria’ association gives all teaching staff access to a range of FAQs on the topic of e-learning and legal issues. This requires you to register on the [‘Forum Neue Medien in der Lehre Austria’ association’s portal](#).

Once registration is complete, you will have access to frequently asked questions in the [FAQ](#) section, which is constantly updated.

Barrier-free access

When creating digital learning content, barrier-free access must also be ensured. Information on barrier-free teaching, from which people with disabilities can also benefit, is provided on the [TUW barrier-free](#) pages. Regular seminars are held on the topic of barrier-free teaching. The seminars currently on offer can be found in the list of [internal events in TISS](#).

Practical examples

Teachers from various courses have declared their willingness to make their [concepts and practical examples on distance learning](#) available. This page will be regularly updated with new concepts. Don't we want to provide a link?

Online training and instruction

An updated overview of planned events (webinars, info sessions, training sessions) as well as offers is provided on the [event page](#). This list is constantly updated. Tip: 'Like' this page so that you are automatically informed of any changes.

Central information pages on distance learning in coLAB

Distance learning good practice

- Concept proposals for holding lectures
- Comprehensive guidelines for holding online examinations (with numerous step-by-step instructions)
- How-to instructions by/for teaching staff with tried-and-tested scenarios
- Distance learning blog with the latest news updates every week
- Numerous descriptions of tools for use in digital teaching
- Matrix for comparing tools and opportunities for educational use
- Collection of frequently asked questions (FAQ)
- Teachers supporting teachers: We are asking teaching staff to contribute their own good practice experiences to support each other

Coronavirus webpage

Contains a central summary of current information concerning coronavirus for teaching staff, researchers as well as students.

Central webpage for room information

Contains an overview of all teaching rooms, their equipment, current capacities as well as room plans.

Support

The support [page](#) in coLAB contains the latest support and contact information on topics such as TUWEL, LectureTube, Zoom and other services and offers provided by the Distance Learning Team.

Please feel free to forward any questions to distancelearning@tuwien.ac.at.

Webinars

In addition to [upcoming offers](#), videos and documents of past training events are naturally also still available. These can be found at: [Overview of training sessions and webinars in coLAB](#)

Excerpt from the offer:

- Crash course on the topic of online teaching
 - *Module 1 First steps for switching to online teaching*
 - *Module 2 Didactic foundations of online teaching*
 - *Module 3 Creating good learning videos*
 - *Module 4 Motivating students online*
 - *Module 5 Structuring self-learning phases to support learning*
- Webinar: Preparing examination tasks for online and offline examinations
- Webinar: Transformation of the exam culture? Skills-based teaching and examination at TU Wien 2025
- Webinar: Distance learning: Are your students still engaged? Activity, motivation and feedback
- Webinar: Effective videos in distance learning
- Webinar: Distance learning with web conferencing – tools – opportunities and stumbling blocks
- Webinar: Recommendations for (online) exams at TU Wien

Documentation and video instructions

Extensive documentation and video instructions on the central learning platform in the [TUWEL Tutorials course](#)
Interactive demo course on TUWEL to independently test TUWEL functions, [TUWEL application scenarios](#)
[Distance learning for teaching staff](#) information page on the TU Wien website (in the Teaching at TU Wien section)

Multimedia – Tutorials

Another comprehensive [collection of multimedia tutorials](#) provided by the Academic Moodle Cooperation contains information on a range of topics and tools.

PDF download: [Guide to digital teaching and learning at TU Wien in the 2020/21 winter semester](#)