Online Teaching Options

Overview of platforms & software to move teaching online
Some general tips for online teaching

Students will most likely not watch your lecture (live streamings/recordings), unless you...

- Decide: Stream the sessions live and/or record them (beforehand)? Several short videos are easier to follow/record than one long lecture. Synchronous teaching depends on stable systems and networks, which you might have little influence on if they are operated externally.
- Plan something interactive. Attach tasks (& peer-reviewing) to it.
- Create clear guidance for discussion boards.
- Make sure you have a stable internet connection for live streaming/conference calls, and that your mic and speakers are turned on.
- Most conference call applications allow for screen sharing. If you work with two monitors, you can use one for screen sharing and one to control the conference call.

To adapt your course to online teaching,

- Rethink the course content/activities/assignments → check last slide for some (quick) guides;
- Decide on appropriate teaching format (e.g. synchronous/live vs asynchronous/pre-recorded) and assessment format;
- Check out (video) tutorials to get acquainted with the features your software/platform of choice offers;
- Do not underestimate the planning and preparation involved with online teaching.
- Whatever you decide using for your online teaching – test it first with friends/family/colleagues.
Data Privacy

The information assembled in this ppt provides a mere overview, NOT a recommendation on which platform or software to use. The services listed in this overview were not comprehensively checked for their data protection compliance. Please check the data privacy compliance independently when choosing the tool most suitable for your purpose and consult your institution’s data protection officer before using new external tools.

- Some helpful Links (in German):
  - Datenschutzkonforme Video- und Webkonferenztool – eine Übersicht der Universität Erfurt
  - DSGVO-sicher? Videokonferenzen, Onlinemeetings und Webinare (mit Anbieterübersicht und Checkliste)
  - Datenschutzfreundliche Möglichkeiten der Kommunikation – Empfehlungen der baden-württembergischen Aufsichtsbehörde
  - Datenschutzwiki der TU Ilmenau – eine kommentierte Liste von Videokonferenzsystemenanbietern
Uni Erfurt

E-Learning & Video conference options listed on university website:
Moodle & DFNconf/AdobeConnect
Moodle

PRO:
• Convenient, as we work with Moodle at the UE anyway, and no need to learn need software/technology.
• Easy to link each session with assignments and assessments.

CON:
• Moodle might not handle everybody uploading their stuff, and video files are large.

→ Consider uploading the video recording/live streaming on another platform and just share the link on Moodle.
Video Conference [Link]

Two options at Erfurt University:

1. **Video conference system (place bound):**
   KIZ R 0.10, Senatssaal or LG2/313
   - Need to register 14 days in advance with URMZ and answer several questions ❌ not particularly suitable for class

2. **Web conference (from anywhere):**
   through DFN-Server with AdobeConnect
   - For small groups (up to 5-15 participants) mobile conference system to be rented in KIZ, which can be connected to notebooks via USB; anybody can create virtual conference room through [online log-in](#)
   - **BUT:** not most suitable for class
   - AdobeConnect (see next slide)
Adobe Connect [Link]

The web conference service through AdobeConnect is part of the DFNconf service. With Adobe Connect, apart from audio and video transfer, hosts can share their screens and upload files for the meeting. These files will be saved on the Connect servers under the corresponding meeting and will be available after the meeting ends. Participants are invited through a link. Recommended from a data protection viewpoint.

Functions:
- Audio/Video Multipoint Conferences
- Shared Whiteboard
- Archive for Powerpoint Presentations
- Application and Desktop Sharing (no Desktop Sharing under Linux)
- Chat
- Polling Tool
- Conference Recording

Problem:
- However, DFN service is available to all German universities. Due to COVID-19, demand for DFN services increased everywhere.
Current information regarding DFNconf and COVID-19 [Link]

Demand for DFNconf service has massively increased!

DFNconf can still be used for Lectures:
- please consider using the DFNconf Streaming Module for Lectures and Conference talks ([Streaming conferences](#))
- Allows for unlimited number of participants (versus max. 23 with Pepix and max. 200 with AdobeConnect)
- Includes text-based two-way communication/chat function

DFNconf can still be used for Meetings:
- maximum video quality for Pepix meetings has been limited to 448p, so the system can handle more meetings

DFNconf ist not prepared for a big jump in its use.
DFNconf does not have the capacities to stream all teaching in Germany. To avoid bottlenecks, please try to hold your events/meetings outside the peak hours of 9-11am and 1-4pm.
More Options for Lecturers

One-Way Teaching
PowerPoint [Link]

**PRO:**
- If you don’t have the time/capacity right now to learn new technology, PowerPoint allows you to record narration through the "Slide Show" menu, and then save as a video. (as suggested on twitter)
- The feature includes pen, highlighter, voice and video recording per slide.
- You can make quick edits, reorder slides, etc. rather than re-recording the entire presentation if you want to make changes.

**CON:**
- Be careful of file sizes. Some Learning platforms have file size limits for uploads, and PPT audio or video files can be pretty large.
- Potentially boring to watch for the students → consider general tips (see above) and think about how to keep students engaged.
PRO:
- It is convenient and the WBS has a youtube account already anyway (with only one video uploaded).

CON:
- Uploading videos freely available to the public could be problematic, since we do not allow other UE students to take courses at the WBS for which the MPP students pay tuition.

⇒ One thing you can do is upload your videos to youtube and set the privacy settings so that only people with a link can watch the videos. Links to the youtube videos for each session can easily be shared in Moodle/any LMS.
Make lectures more interactive

classEx [Link]
- classEx is a web tool for conducting interactive surveys and classroom experiments.
- Students log in with their mobile devices (smartphone or notebook) and can participate interactively at the lecture. Results are shown instantly on the presentation screen of the lecturer with concrete graphs.
- It was developed at the Chair in Economic Theory at the University of Passau and is free to use.

Presenterswall [Link]
- Interact with your audience via the PresentersWall tool. Get your audience to vote with their smartphones and show the submitted results live on a big screen. For example, choose to display in bar charts, pie charts or create a word cloud.
- Need to purchase campus license.

Mentimeter [Link]
- Get real-time input from remote teams and online students with live polls, quizzes, word clouds, Q&As, etc.
- Need to purchase campus license.

Kahoot [Link]
- Use Kahoot! for group learning, e-learning, distance learning, and self-study
- Free basic school and personal plans offering basic features
More Options for Seminars

Interactive / Two-Way Teaching
Zoom [Link]

Why Zoom? (by Gorona Misic on twitter)
- You can share screen and sound, inbuilt whiteboard, chat, file sharing, possibility of annotations, raising hand option and breakout rooms (which allows you to split the class into smaller groups for separate discussions or group work).
- If you want to use the basic version, consider holding your class as 3 blocks of 30 minutes with 3 separate links.

Basic version (free)
- up to 100 participants (who do not require zoom account themselves)
- Time limit of 40 minutes for meetings with 3+ participants

Pro version (13.99 EUR/mo/host)
- Up to 100 participants
- Time limit of 24 hrs

Potentially problematic from a data protection viewpoint, although Zoom quickly closed the most severe security loopholes recently. Consult your data protection officer if in doubt.
This is what a recorded Zoom lecture can look like.
Find here a Teacher Tutorial for Using Zoom for Online Teaching. There are many more out there.
Microsoft Teams (formerly Skype for Business/Lync)

Used by several European academics. Teams broke down on Monday 16 March, as many companies started using it, but until teaching starts, Microsoft should have increased their capacities. Consult data protection officer regarding data privacy compliance.

**PRO**
- Sign up is free [Link]
- You can create “Teams” corresponding to courses
- Can include Stream, a Microsoft app for uploading videos (i.e. rather than using youtube)

**CON**
- All participants need to register on Teams

To start a meeting in a channel, download the desktop app or use a supported browser such as Google Chrome or Microsoft Edge.

**How to: Starting a Video Call in MS Teams**
BigBlueButton [Link]

BigBlueButton is a web conferencing system designed for online learning. Find video tutorials here.

PRO

- Real-time sharing of audio, video, slides, chat and screen
- Students are engaged through sharing of emoji icons, polling and breakout rooms
- Many learning management systems (LMS) have a native integration or plugin for deep integration of BigBlueButton, e.g. Moodle has a plugin
- Learning tools interoperability (LTI) 1.0 compliant for widest adoption
- Open source
Webex [Link]

Webex is a comprehensive solution for video conferencing, virtual collaboration and high interoperability.

**PRO**
- High security standards incl. end-to-end encryption and server in Germany
- Data protection friendly per default
- Shibboleth integration

Webex offers different functions to users of different plans, which you can find [here](#).
Jitsi [Link]

Jitsi is a set of open-source projects that offers multi-platform video conferencing.

Jitsi is used e.g. by many Bavarian universities and the Leibniz Supercomputing Centre of the Academy of Sciences and Humanities.

**PRO**
- Open source
- allows you to easily build and deploy secure videoconferencing solutions
Google Hangouts Meet [Link]

**PRO**
- **Helping businesses and schools stay connected in response to Coronavirus**, Google is rolling out free access to advanced Hangouts Meet video-conferencing capabilities to all G Suite and G Suite for Education customers globally including:
  - Larger meetings, for ≤ 250 participants per call
  - Live streaming for ≤ 100,000 viewers within a domain
  - The ability to record and save meetings to Google Drive
- These features are typically available in the Enterprise edition of G Suite and in G Suite Enterprise for Education and will be available at no additional cost to all customers until July 1, 2020.

**CON**
- Need to register [Link]
- Free only until July 1, while (online) teaching will probably go on for longer.
Social Media

Social media platforms such as Facebook and Instagram offer live video streaming with live commenting function (and the option to replay/save the video).

**PRO**
- Most students have social media accounts, and most WBS cohorts have their own facebook groups anyway.

**CON**
- Apart from data protection issues, it might be best to separate private and professional/university accounts.
Other (commercial, not ideal) providers for conference calls that you might consider

**GoToMeeting** [Link]
- Cheapest option “professional” (10,75 EUR/mo) 150 participants
- No time limit
- Test for free for 14 days
→ for occasional video conference, e.g. if your seminar is held as a block and not on a weekly basis

**UberConference** [Link]
- Free option only up to 10 participants
- Other option max. 45 participants
→ for small seminars with very few participants

**FreeConferenceCall.com** [Link]
- Free to register account and easy to get started
- No video, but works well with bigger groups and includes Q&A feature/speaker list
→ For lectures/seminars where no visual input is needed or where it is provided on another platform in advance
More Stuff
The mission of the Online Learning Research Center (OLRC) is to improve academic achievement and equity in online learning.

With funding from NSF Grant Number 1535300 (PI: Mark Warschauer), our team has been systematically exploring the effectiveness of virtual learning in the particular setting of STEM courses in large research universities. In addition, Di Xu has an NSF
More useful links

- Manual “Synchronous Online Courses” by ProLehre Technical University of Munich
  (Manual “Synchronous/Asynchronous Online Courses” to follow)
- Thread on *technology* for teaching online – a comprehensive twitter thread
- Teaching Online Tips by Dr. Rebecca Kreitzer – a personal track of resources & tips
- Quick menu of 5 online teaching options to transfer F2F course content online
- Going Online in a Hurry: What to Do and Where to Start – a quick guide: 6 steps
- Going online with your teaching – a quick guide for CEU faculty
- Teaching Effectively During Times of Disruption, for SIS and PWR – Stanford Guide
- 40+ Tools for Distance Learning (A response to COVID-19)
- AoIR Collated Resources for Online Teaching
- The American Sociological Association provides open access to TRAILS (its online peer-reviewed library of high-quality teaching resources, including class activities, assignments, and more) until 31 March
- For those preparing to move to online teaching, a resource thread
- Tech against coronavirus - list of products you can use to maintain collaboration and work remotely with your team
Contact

Please direct your questions, recommendations, etc. toward 
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