Instructions for written IT-based remote exams for examination candidates: WiSe 2020–21*

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Dear Students,

Universität Regensburg, its lecturers and members of staff are working intensively to make your exams possible despite the Corona pandemic and to ensure the progress of your studies. Due to the Corona-related health risks and the current high incidence of infection, the examinations cannot be offered as usual during the winter semester 2020–2021.

Data protection, the use of information and media technology, and organizational implementation are all areas for which new forms of examination require special regulation and preparation by both the examiners and you as the examinees. Not everything will run as smoothly as usual, and there are still many unanswered questions. We therefore ask for your understanding and generosity towards all participants.

These instructions and the university-wide binding regulations provide a framework for all remote exams taking place at Universität Regensburg in the WiSe 2020–21. Specifically, this guide introduces remote online exams and take-home exams\(^1\). You will receive specific instructions for your individual examinations from your examiners.

Questions about your individual exams should be directed to your examiner or you can contact your student representatives (Studierendenvertretung).

We wish you good luck for your exams!

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* These instructions are based on the "Sample Instructions for Exam Candidates" (Musteranleitungen für PrüfungsteilnehmerInnen) from the Munich University of Applied Sciences, which has conducted more than 80,000 examinations in the form of various IT-based remote examinations since SS 2020.

\(^1\) See the general examination regulations (Rahmenprüfungsordnung) WiSe 2020–21 dated November 23, 2020, §6 for remote online exams and §7 for take-home exams.
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1. University-wide regulations for the examinations in WiSe20/21

1.1. Legal basis

According to the Bavarian regulations on remote testing (Bayerische Fernprüfungserprobungsverordnung, BayFEV), IT-based remote examinations can be offered as an alternative to a face-to-face examination if and to the extent that the latter cannot be conducted as a result of restrictions and obstacles due to a pandemic, epidemic or other significant infectious event.

In the following we distinguish between

- **Remote online exams** conducted using telecommunication-enabled devices, without mandatory presence at a specified location and under supervision, and
- **Take-home exams** conducted using telecommunication-enabled devices, without mandatory presence at a specified location but without supervision.

1.2. Dates, place, access data and organizational information

Your examiners will provide you with the date, location, and information on the examination process and any aids permitted. Your examiners will provide you with the access data for the video conference and, if necessary, for the examination system of your examination up to 3 days before the examination.

1.3. Identity control

You will need your student ID or identity card for the identity check. Please make sure that your ID is always to hand during the examination. Note: The student ID does not need to be validated.

1.4. Declaration of the independent completion of a take-home exam

Take-home exams are completed without supervision within a specified time frame. Depending on the examination scenario, only certain or unrestricted aids may be permitted. Therefore, after completing the exam, you must submit a statement confirming that you have completed the exam independently. The statement reads as follows:

"I hereby declare that I have worked on this paper independently and without outside help and that I have not used any sources or aids other than those indicated and that I have marked verbatim quotations and paraphrasing as such."

This declaration is uploaded with paper-based exams at the end of an exam together with the photos of the exam sheets or sent to the examiner by e-mail. For exams conducted via ILIAS, the declaration is made in the exam in a separate field.
1.5. Special regulations for remote online exams

Remote online exams are conducted using telecommunication-enabled devices, without presence at a specified location, and under supervision via videoconferencing. Various additional regulations are associated with supervision via video conferencing.

1.5.1 Data protection in the context of video conferencing supervision and the right to choose the examination procedure

In the video conference, your examination workplace will be visible to the invigilator and all examination participants. Please ensure that all personal items (e.g. photos, folders, calendars) are covered or not in the picture. In addition, during the identity check, your ID card may become visible to other participants, as it is not practical to use breakout rooms to avoid this, especially for exams with a large number of participants. Therefore, you are welcome to use your student ID card or cover your ID card number. Regardless, the university must ensure that your participation in a video-conferenced exam is voluntary. Therefore, you have the choice to participate in a remote online exam or take a scheduled face-to-face exam instead.

1.5.2 Visiting the toilet during exams with video conferencing supervision

Visiting the toilet is allowed in exams with video conferencing supervision as in all other exams. As a rule, only one candidate can go to the toilet at a time. The invigilator will provide further details. Toilet visits are recorded by the invigilator.

1.5.3 Test runs of exams

The examiners offer test runs for exams with video conferencing supervision and other special requirements. As a participant, you are strongly encouraged to attend the trial runs offered for exams. The purpose of the test run is to identify and optimally resolve any technical issues that may arise on your side, clarify organizational issues, and familiarize you with the new exam situation. This significantly reduces the risk of delays during the actual exam. If you do not take part in the trial run, avoidable technical problems may occur during the actual exam, so that successful participation in the exam may no longer be possible. It may be possible to resolve problems that become apparent during the trial before the actual exam takes place.

1.5.4 Technical faults in a test

In case of malfunctions, especially of the transmission of video images, please continue working or follow the instructions of the invigilator. If your connection to the video conference is interrupted, log in again immediately.

If your exam cannot be supervised without interruption or cannot be completed for technical reasons, the examiner will decide after the exam whether an assessment is possible. In the event of prolonged technical malfunctions, the examination will be cancelled. In this case, the examination attempt is considered not to have been taken.
2. Special requirements and instructions for remote online exams

2.1. Technical equipment required

Be sure to check early to make sure the workstation you will use for the exam is functional:

- **Do you have a computer with a monitor, a PC, laptop, or tablet to access the exam questions?**

- **Do you have a second device, ideally a smartphone, for performing video supervision with the ZOOM Client installed?**

- **Printer:** Unless otherwise specified by the examiner, a printer is not required. Examiners may authorize you to use a printer to print the exam items. If printers are to be used in examinations for special examination tasks (e.g. technical drawings in templates), then the examiner must ensure that all examination candidates have a printer, e.g. by the faculty providing a sufficient number of loan devices. Further details on the technical equipment and the use of the devices are described in the individual examination instructions, where applicable.

- **Do you have a sufficiently fast Internet connection (DSL/cable)?**
  A video conference via the mobile network (LTE, 3G) is error-prone and cannot meet the requirements for a stable connection. You also need a stable internet connection to download the exam questions and upload the exam sheets. At least 500Kbps for upstream and at least 1Mbps for downstream are required. Use the application www.breitbandmessung.de to test the internet connection on your end device and especially test the upload bandwidth. Inform any roommates etc. not to use the Internet at the same time.

- **Can you connect to your router from your end-device (PC, smartphone or other) - ideally via cable?**
  Please use this option if available. A connection via W-LAN is more error-prone and slower, and the stability of the connection can also be significantly affected by other users.

- **Are your microphone and speakers functional?**
  Be sure to test the functionality of your computer's built-in or external microphone and speaker and familiarize yourself with their operation (volume control, activating the microphone). Note: headphones and headsets may be prohibited by examiners for supervisory reasons.

- **Is your web camera functional?**
  Interference-free image and sound transmission is a mandatory prerequisite for a valid examination with video conferencing. Test the functionality of your web camera and familiarize yourself with its operation. You can also use your smartphone’s camera.
Note: the smartphone can also be used to photograph the exam sheets. You will need a functional photo/scan app for photographing handwritten exam sheets.

- **Are the batteries of your smartphone or other devices charged?**
  Ensure a permanent power supply for the test. Where necessary, have your charging cable ready.

- **Is the ZOOM video conferencing software installed?**
  When logging into a ZOOM meeting, you will be prompted to install software. We recommend you do install the software to use in online examinations, as the options available via the web access are limited. You can obtain the ZOOM Client for PC at https://zoom.us/download, for smartphones in the Apple App Store or Google Play Store. For exams with video conferencing, it is necessary to log in via SSO with your university account using the ZOOM Client. It is not possible to participate in a meeting for an examination anonymously via the meeting link.

- **Are the software programs/apps you will need installed and functioning?**
  Among other things, you will need software to read PDF documents, e.g. Acrobat Reader.

- **Have you had a successful trial run with your examiner or fellow students?**
  Attend a test session or organize a test with fellow students. Test whether the audio and video connection works. Familiarize yourself with the functions of the video conferencing software, especially with the login. Also check the functions in breakout rooms. A test run is usually organized by the examiners and communicated to you in good time. Also test the scanning/photographing and uploading of exam sheets.

- **Do you know your university account e.g. to login into ILIAS and ZOOM?**
  Without access to your university account it is not possible to login to ILIAS or ZOOM.

- **Do you have enough paper ready for your exam?**
  As a rule, blank, white squared DIN A4 paper is used. If necessary, your examiners will inform you about any special requirements.

- **Have you followed the guidance and instructions for your exam?**
  If you do not have any information 5 days before the exam, check with your fellow students and your examiners. Go through the exam instructions step by step.

2.2. **Setting up the workstation for exams with video supervision**

Remote exams under supervision are carried out using two devices.

- The **first device**, usually a laptop/notebook, is used to **work on the tasks** (ILIAS exam) or to open the assignment (paper exam).
• The **second device**, usually a smartphone, is used for **video monitoring** via the ZOOM app. You therefore only need to have a camera integrated on the second end device with which you dial into the ZOOM meeting.

You must be visible to the invigilator from the side via the camera in the second end device (e.g. smartphone, tablet). The invigilator must be able to see your head, upper body, hands, and the sheets of paper on which you are writing, as well as the monitor with the assignment or ILIAS entries. The web camera must be positioned sideways for this purpose. It must be recognizable whether you are writing on paper or working in ILIAS or a chat or e-mail program. The detailed entries in ILIAS must not be readable via the camera. If you are using a smartphone camera, before the exam test the camera image transmitted by establishing a test connection from your smartphone to your computer and checking on the computer screen how well the screen can be recognized in the camera image.

The camera image should be taken in **landscape format** (very important for smartphones!). With some smartphones, the image is switched back to portrait format after each switch to a breakout room or after returning to the main meeting. Therefore, please check, especially after entering a breakout room, whether the image sent can still be seen in landscape format. Sometimes it is necessary to adjust the settings on the smartphone or to move the smartphone briefly to the vertical position and then back to the horizontal position. Test this for your smartphone before the exam.

You may only have items that are required for the examination on your workstation. If you have unauthorized aids on the workstation after the start of the examination, this constitutes cheating.

A possible setting with a smartphone web camera is shown in the figures:
2.3. Setting up video supervision on the device

- Video supervision takes place by participating in a video conference in ZOOM, in which you dial in with your second device. This can be done via a PC using the ZOOM client or via your mobile device using the ZOOM app.
- This device is only used for participation in the video conference, but not for processing the examination tasks.
- Make sure that you protect your privacy as best as possible. Make sure that no personal items, e.g. photos on the walls or books on the shelves in your room, are visible in the video conference. For this purpose, please remove or cover all corresponding items.
- The virtual background function cannot be used in ZOOM during an examination.
- While you are in the video conference, mute your own microphone. Leave your audio on to respond to announcements from the invigilator. If you have any questions, you will be moved to a separate breakout room. Here you can turn on your microphone to communicate with the invigilator.

Access to the videoconference via PC

- If you have a second laptop, you can also use it a second end device to log into ZOOM. However, a smartphone is still necessary for paper-based remote exams that involve the uploading of photos at the end of the exam.
- Before you can join the meeting, you must log in to ZOOM with your university computer center (RZ) account. You can install the ZOOM client via the page https://zoom.us/download.
• In the login screen, select the item "Log in with SSO" to log in to ZOOM with your computer center (RZ) account. This is mandatory to gain access to the meeting. Private ZOOM accounts will not be granted access.

• Specify the domain "uni-regensburg.zoom.us" and "Continue".
• You will be redirected in your browser to the Shibboleth Single Sign-On page of Universität Regensburg, where you can log in with your computer center (RZ) account.

![Login page](image)

• After you have given your consent to share your name and student email address with the ZOOM service, a pop-up window will open in your browser to launch the client software.

![Consent dialog](image)
• In the subsequent personal meeting window, a personal picture, if stored, or a name abbreviation is displayed in the top right-hand corner, and the personal meeting ID appears in the top left-hand section. This allows you to check that you are logged in correctly.

• In the next step, the link to the ZOOM Meeting of the exam can be used to access the exam room.

• You must log in to the video conference with your first and last name. If you log in correctly, you will NOT be taken to the waiting room, but directly to the examination room. If you enter the waiting room, please log out and log in again.

Access to the video conference via ZOOM app

• First install the ZOOM app on your smartphone via the App Store.
- The meeting is then accessed in the same way as on the PC.

2.4. In the video conference

Once you are in the exam room, wait for further instructions. If necessary, the examinees will then be divided into subgroups called breakout rooms.

- If necessary, you can also communicate with the invigilator by using the “raise hand” function, if breakout rooms are being used in the conference, you can also use the "call for help" function in the ZOOM menu bar.
• If the videoconference is interrupted for technical reasons, try to re-establish the connection immediately. Do not abort the examination under any circumstances but continue working. The examiner or the examination board will decide how to proceed after the examination. If the connection is interrupted for whatever reason and cannot be re-established within a reasonable period of time, the examination of the student concerned will be cancelled if necessary.

• During the entire examination time, switch your own microphone to mute. Leave your loudspeaker on so that you can respond to announcements from the invigilator. You may not leave the examination area during the examination and no other person may be in the room.

• Toilet visits are possible with the permission of the invigilator. This requires a message to the invigilator (chat or “raise hand” signal). The invigilator will give you a sign when going to the toilet is possible.

• Have your student ID ready. The invigilator may ask you to show your ID at any time.

3. Use of the ILIAS examination system

The ILIAS examination system is used in various ways for remote examination formats. While it is primarily used to open assignments and upload results for paper-based exams conducted remotely, it is used for the entire processing of the assignment for fully digital exams conducted entirely on the PC.

To ensure the exam progresses smoothly under examination conditions, it is essential for students to familiarize themselves with the system in advance. For this purpose, there are several test examinations that every student can perform. Here, we briefly present the most important functions to make it easier for you to get started with the system.

To access the examination system, open a browser on your PC and enter the address https://epruefung.uni-regensburg.de/.
Log in with your computer center (RZ) account (NDS abbreviation and personal password) to get to your personal user interface. Here you can switch between your personal desktop and the repository via the navigation bar - marked red in the figure. When you log in for the first time, your desktop will be empty. You can find units via the repository that you can add to your desktop, so you can better organize your personal learning content.

The repository is organized into different categories that you can click through to find the content that is relevant to you.
Here you can also find the test exams, which you can work on in advance. You can access a test by clicking on its name - shown in the figure as "Example exam_2" ("Beispielprüfung_2"). However, you can also add the test to your desktop first by selecting "Add to Desktop" from the drop-down menu on the right-hand side. This saves the test to your desktop so you can access it quickly the next time you open the exam platform.

When you click on the test, the test interface opens. Here you can, among other options, start the test by clicking on the "Start the test" button.
The tasks vary depending on the exam, the figure shows a multiple-choice task as an example. The operation is designed to be intuitive; navigate through the tasks and give your answers using the various buttons available. You can finish the test by clicking on "Finish test". Feel free to try out all test exams to get to know the system. If you still have questions, please contact the e-exam team at support@rz.uni-regensburg.de.

4. Paper-based exams with ILIAS

4.1. Starting a test and issuing assignments

The exam’s assignments will be made available via the relevant ILIAS course. Your examiner will also inform you about the assignment being issued in good time.

4.2. Submission of the examination documents

- Before submitting, sign each sheet below the last written word/expression.
• Scan and upload the sheets as described in the next section.

• You can use your smartphone to scan / photograph the sheets, even if you use it to participate in the supervisory video conference. In this case, the ZOOM app may be interrupted during the upload. If the invigilator had not yet completed the identification of the participants, a new dial-in to the ZOOM meeting is required after the upload. The examiner will redirect you to the correct breakout room after dialing back into the meeting.

• You can start scanning as soon as you finish the exam. Your exam is considered finished when the invigilator/examiner ends the exam or when you write the word "End" in the chat.

• You will have 15 minutes for the overall scanning and uploading process after you finish working on the exam assignments.

• Upload the resulting PDF file to the ILIAS exam course. If there encounter technical problems when uploading it, you can email the file to the examiner.

• For further details, please contact your examiner.

• On the cover sheet you must clearly indicate the following: name of the exam, date and time of the exam, name of the examiner, your first and last name.

4.2.1 Scan and upload with Apple - iOS - (screenshot created on iOS 14.3)

1. Open the "Files" app. This is pre-installed on iOS devices by default.
2. In the Files app, click the button in the upper right corner to select "Scan Documents".

3. After the camera opens, click "Auto" in the upper right corner to set the shooting mode to "Manual" (otherwise the camera will repeatedly trigger automatically and may create unwanted images). Once you have done this, the app will display the note "Auto Shutter Off".
4. By clicking "Keep Scan" you confirm that the photo quality is sufficient and everything is readable. After you have photographed all the sheets you can save the images as a single PDF document on your device by clicking "Save".

5. Now log in to ILIAS via your smartphone browser using https://epruefung.uni-regensburg.de and navigate to the relevant exam for which the submission is to take place.
6. Navigate to the "Hand in" button. Then first click on "Upload file" and then on "Choose file".

7. You can now select documents from your Files app via the "Browse" field. Select the document you created earlier and upload it by clicking the "Upload" button.
8. To check whether the correct document has been uploaded and whether it is complete, it is a good idea to log into ILIAS on the second end device and check the document.

4.2.2 Scan and upload with Android

Note: Due to the large number of different Android versions, the solution presented here is merely an example. Students are recommended to get to grips with this functionality on their own smartphone and test it well in advance.

1. From the Google Play Store, install the "PDF Scanner" app and launch it. Click the camera icon to enter the capture mode.
2. If you want to scan multiple pages, click on "Multiple Pages". Then you can scan one page at a time by pressing the round trigger button. Once you have scanned all the pages you can continue by pressing the arrow button.

3. Now you can switch between the individual scans by using the arrow keys. You can adjust the document area for the individual scans by moving the points at the corners and edges. You can also delete individual pages or repeat scans. Confirm the process by clicking the "Done" button.
4. Now save the document as "Original" by clicking the "Save" button. Confirm by selecting PDF as the format and leaving Quality at "regular". You can also rename the document afterwards. Finally, click the "Save" button to save the document locally on your smartphone.
5. Now log in to ILIAS via your smartphone browser using https://epruefung.uni-regensburg.de and navigate to the relevant exam for which the submission is to take place. Navigate to the button "Hand in".

6. Then click on "Upload File" and then on "Choose file". Then choose "Files" to select a document on your smartphone.
7. Now you need to select the PDF you have stored locally on your smartphone. First click "My Files" to find local files. Depending on the storage location, you need to select the "Internal storage" and look for "PDF Scanner" in the folder structure. In this folder you will find the document you want to select.

8. Complete the upload by selecting "Upload".

9. To check whether the correct document has been uploaded and whether it is complete, it is a good idea to log into ILIAS on the second end device and check the document.