

# Briefing / Vorbesprechung Assistive Systems (VO+UE) & Assistive Technology 1 (VO)

Human Computer Interaction Group (HCI)  
Institute of Visual Computing & Human-Centered Technology,  
TU Wien

WS 2019 / 2020

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## Winter term:

Assistive Technology 1 VO (187.A59)

Assistive Systems VO (187.A95)

Assistive Systems UE (187.A96)

## Summer term:

Assistive Technology 2 VO (187.A60)

Barrier-free Internet VO (187.A57)

Barrier-free Internet UE (187.A58)

Partly also possibilities for seminars and diploma thesis

In the **VO Assistive Technology 1** (winter term) the focus is on the human abilities influences through disability & age and basics for the adapted use of assistive technology / aids

The **VO Assistive Technology 2** (summer term) analyzes various approaches and possibilities of AT (in the sense of aids) for the field of communication despite barriers (disability)

The **VO + UE Assistive Systems** (Winter Semester) deals with more autonomous, context-sensitive AT systems, which become active on their own initiative, such as: starting pro-actively an interaction with the user. AAL used as application area.

The VO + UE Barrier-free Internet (summer semester) is about the accessibility of the increasingly important Internet for all

## As written examination:

Approximately 10 questions on topics that were dealt with in AT2.

Note: Slides available on TISS contain the essential information in English and some extra stuff partly in German.

Duration: about 30 minutes

### Hints:

Try to give short answers, especially if no description is required.

(Note: It's not the length that counts!)

Questions relate to the sketching of concrete application scenarios of AT under given settings

Dates: about every 2nd month

Details and registration in TISS.

If you have any questions, please contact us

(preferably by email: [peter.mayer@tuwien.ac.at](mailto:peter.mayer@tuwien.ac.at) and [paul.panek@tuwien.ac.at](mailto:paul.panek@tuwien.ac.at))

# Dates for the lecture Assistive Systems (2019W)

Lecture consists of 6 blocks

Always on Thursday 9:15 – 13:00 (cf TISS)

17.10.2019, 24.10., 31.10.,  
07.11., 14.11., 21.11.  
(see TISS)

After each block the slides will be available as PDF (download from TISS) with essential parts in English.

Mandatory attendance: NO

Exam: Thursday 09 Jan 2020 at 13:15 (till 13:45)

For further dates please check TISS.

At least 3 dates will be offered each term for exams.

## Introduction – Sequence of Course

### I. Demarcation and Definitions

- Umbrella term AAL
- Technical Aids vs. Assistive Systems

### II. User Interface (HCI)

- Active Support

### III. Assistive Robots – Movement

- Human Robot Interaction (HRI)

### IV. Sensors – are entering the living area

- Safety and Support

### V. Ethics, Law and Economics

### VI. Requirements Analysis and Evaluation

## blocked: 3 appointments

Thursday afternoon, venue: SemRaum Zemanek

5.12.2019, 14:00 c.t. – 15:00 Uhr: Introduction, assignment to topics and groups

16.1.2020, 13:00 c.t. – 17:00 Uhr Presentation of group work, discussion in plenary

23.1.2020, 13:00 c.t. – 17:00 Uhr Presentation of group work, discussion in plenary

Language: English

Mandatory attendance: YES (!)

The UE includes:

- Individual work and work in a team (group of 3)
- **Handling a question and elaboration** about **selected topics** based on literature and other sources
- Submission of a **text document** per team
- **Oral presentation of results** of each team
- Joint discussion of the presentation



# Dates for the lecture VO Assistive Technology 1 (2019W)

Lecture consists of 6 blocks

Always on Thursday 9:15 – 13:00 (cf TISS)

28.11.2019, 5.12., 12.12.

9.1.2020, 16.1., 23.1.2020

(see TISS)

After each block the slides will be available as PDF (download from TISS) with essential parts in English.

Mandatory attendance: NO

Exam: Thursday 13.2.2020 at 13:15 (till 13:45)

For further dates please check TISS.

At least 3 dates will be offered each term for exams.

- Foundations (Part A)
  - Introduction and definitions, Medical foundations (visual, tactile, auditory perception), disability from medical and demographic viewpoint
- Methods (Part B)
  - Classification of assistive aids, matched MMI, Design of environment
- Applications (Part C)
  - Assistive aids for orientation, manipulation, daily assistance, ...

- Previous Knowledge: no specific knowledge needed
- The UE Assistive Systems is optional: possible to do only VO Assistive Systems and skip the UE
- (Only) UE Assistive Systems has mandatory attendance
- The slides usually will be uploaded after each block of the lecture. If needed we can provide at beginning of each block (→ send request via email)
- If needed we can provide access to slides from last year (send email request)

# Any further Questions ?

- We are happy to discuss any questions.
- Do not hesitate to contact us  
(preferably via email)

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