Keynote/Workshop Program
Jürgen Handke, 2020 (1st Quarter)

The program may be subject to changes due to recent developments.

Training covers a duration of 6 hours (plus breaks) and can freely be composed of the following components:

Component	Topic	Type	Duration
A1	*Teaching and Learning in the 21st Century/in the Digital Age* (with subsequent ‚critical' discussion)	Lecture	30 to 45 min
A2	*E-Assessment – Variants and Scenarios* (with subsequent ‚critical' discussion)	Lecture	30 to 45 min
A3	*Robot Assistants in Education* (with subsequent ‚critical' discussion)	Lecture	30 to 45 min
A4	*Internationalisation and Digitization* (with subsequent ‚critical' discussion)	Lecture	30 to 45 min
B1	*Digital Scenarios in Use - 6 Steps into Digitization* subject-specific proposals about the realization of digital scenarios	Workshop	2 hrs.
B2	*Educational Videos – A First Step into Digital Teaching* hands-on: simple educational videos using the office-setting	Workshop	2 hrs.
C1	*Working with Robots* hands-on working with robots, educational robotics	Workshop	4 to 6 hrs.
D1	*Participation in panel discussion*	Podium	1 to 2 hrs.

The combination of these components results in the following 6-hour offer packages:

Nr.	Title	Components
1	*Digital Teaching and Learning*	A1 , B1, B2
2	*Digitization and Internationalization*	A1 , A4, B1
3	*Electronic Assessment*	A2, B1, B2
4	*Educational Robotics*	A3 , C1

General Add on: D1 Participation in panel discussion (included in the total duration)

Estimated fee: current daily rate (on request) plus travel costs and bb.

For all offers, the following surcharge applies in the case of robotic assistance:

- for a Nao-Robot (Transport via railway)
- for a Pepper-Robot (Transport via SUV)

All offers include the provision of the required materials in a Google folder in advance, thus guaranteeing an optimal preparation of the participants.

If the client/host uses the ILIAS or MOODLE platform, all materials created in workshops B1 and B2 will be assembled directly into learning packages on these platforms. Prerequisite is a temporary access to the respective platform.

Information about the components (lectures / workshops)

A1. Lecture: *Teaching and Learning in the 21st Century/in the Digital Age*

Nearly all branches of public life have been introducing digital methods into their daily routines with one exception: teaching and learning. Teachers and learners of all levels have by and large been stuck in 20th century teaching scenarios that dispense with the principles of digitization. In his lecture, Prof. Handke, one of Germany's leading experts of digital teaching and learning, first identifies the digital elements, scenarios and formats that not only solve numerous problems of traditional teaching and learning but will also be beneficiary in many ways. Using an integrative model of digitization he also shows how new digitized course formats enrich teaching and learning and lead to more individualization and higher degrees of flexibility.

The lecture will be held in a formative format, i.e. all participants will be asked to use their mobile devices to influence the exact proceedings via live voting.

Literature (German):

- Handke, Jürgen. 2017. *Handbuch Hochschullehre Digital.* Marburg: Tectum Verlag.
- *Digitale Lernszenarien im Hochschulbereich*. 2016. Arbeitspapier #15 des Hochschulforums Digitalisierung.

Video Link: *From Traditional to Digital*
https://youtu.be/-z2IuzBLMbs (or QR-Code on the right)

Goals

The participants will
- identify the problems of traditional teaching and learning scenarios,
- specify digital solutions and apply them to their discipline,
- understand and apply the new options for in-class scenarios,
- be enabled to estimate the costs and efforts necessary for the digitization of teaching and learning in their field

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A2. Lecture: *E-Assessment – Variants and Scenarios*

What still seems to be visionary for many institutions has become reality in the current examination scenarios: assessment applying modern technologies. In order to understand these new possibilities, we will define the principles of electronic assessment and its potential and will look at various types of e-assessment beyond mere knowledge tests. With trend-setting concepts such as the competence-oriented e-assessment with Internet use, collaborative group e-assessments or the use of humanoid test robots, the future eventually becomes the present.

The lecture will be held in a formative format, i.e. all participants will be asked to use their mobile devices to influence the exact proceedings via live voting.

Literature (German):

Handke, Jürgen/Schäfer, Anna Maria. 2012. *E-Learning, E-Teaching und E-Assessment*. München Oldenbourg Verlag: Kap VII.

Video Link: https://youtu.be/qtCf0ra6SeU (or QR-Code on the right)
E-Assessment on the VLC – Beyond Multiple Choice

Goals

The participants will
- identify assessment and assessment formats for academic testing
- be introduced to various test types
- be confronted with various ways of electronic testing

A3. Lecture: *Robot Assistants in Education*

Humanoid robots are becoming more and more popular in many areas of public life: nursing, banking, retail and, to some extent, teaching. The project H.E.A.R.T. (Humanoid Emotional Assisstant Robots in Teaching), which is funded by the German Ministry of Education, explores new ways in higher education by using humanoid robots as assistants, and is thus setting the trend here.

The lecture explains the current capabilities of humanoid robots, informs about the central research and development issues using the findings of project H.E.A.R.T. and provides ideas for the use of humanoid robots as assistants in education.

Website: https://www.project-heart.de/

Video Link: https://youtu.be/7TEIHHnpLSE (or QR-Code to the right)
H.E.A.R.T. - Humanoid Emotional Assistant Robots in Teaching

Goals

The participants will
- be introduced to the state-of-the art in educational robotics
- evaluate the capabilities of humanoid robots in teaching
- understand the complexity of man-machine dialogues
- define teaching scenarios for robots in education

A4. Lecture: *Digitization and Internationalization*

Digitization and internationalization are often treated separately in Germany.

The lecture shows how closely the two terms are interlinked and how easy it is for the higher education institutions - almost as a by-product of far-reaching digitization - to establish international contacts using the potential of digitization.

Using the successful international MA Program "Linguistics and Web Technology" we will show how digital teaching concepts cannot only meaningfully be integrated into the curriculum, but how problems of teaching can be solved and how the international outreach can be increased.

Goals

The participants will
- get to know the digital components and scenarios of digital teaching
- get to know the principles of operational online courses
- understand the integration of modern electronic assessment formats
- learn how to integrate the social networks into their curricula

B1. Workshop: *Digital Scenarios in Use - 6 Steps into Digitization*

This workshop uses interdisciplinary as well as subject-specific concepts in order to create digital elements for teaching. We will focus on using Open Educational Resources (OER) and will show how these can be compiled to small learning packages that can be integrated into the process of teaching and learning. This includes the discussion of licence aspects.

In addition, digitized scenarios for universities are shown and will be critically examined: flexible on campus formats (FLOCKs), online courses, MOOCs and pMOOCs.

Literature (German):

Handke, Jürgen. 2014. *Patient Hochschullehre.* Marburg: Tectum Verlag.

Video Link: https://youtu.be/kWfFUUM7yUI   (or QR-Code to the right)
Six Steps - A Roadmap Towards Digitization in Linguistics

Goals

The participants will
- identify the problems of traditional teaching
- formulate solutions in a digital world and transfer them to their discipline
- compile OER into small learning packages
- understand and apply the new possibilities of in-class tuition

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B2. Workshop: *Educational Videos – A First Step into Digital Teaching*

This workshop will first provide a typology of educational videos and will then continue developing simple educational videos in an office setting.

Using their notebooks, tablets or laptops the participants will be shown how to produce and refine their own educational video(s).

Literature (German):

- Handke, Jürgen. 2017. *Handbuch Hochschullehre.* Marburg: Tectum Verlag. 2nd Edition.

Video Link: *Controlling Access in Educational Videos*
https://youtu.be/ymCb_8ISbyI (or QR-Code to the right)

Goals

The participants will
- understand the potential of using educational videos,
- create simple educational videos using the office setting,
- get to know the specific tools and concepts for educational videos.

C1. Workshop: *Working with Robots*

This workshop introduces the methods that can be used to learn and improve algorithmic thinking, an essential challenge which is of particular importance in today's digital world. The "vehicle" for this enterprise are humanoid robots and their particular abilities: speech, hearing, motion, emotions and vision.

In the practical part, the participants will create simple robot applications on their notebooks/laptops and apply them to the robots.

Robot model/Software used: NAO robots, Choregraphe 2.1.4/2.8, Softbank Robotics.

Literature (German):

Handke Jürgen. 2020. *Humanoide Roboter in der Bildung.* Baden Baden: Tectum Verlag. 2.(to appear).

Video Link: https://youtu.be/7TEIHHnpLSE (or QR-Code to the right)
Humanoid Emotional Assistant Robots in Teaching

Goals

The participants will
- get to know the options of using robots
- should create simple robot apps
- develop ideas for the use of robots in teaching and compile them into corresponding algorithms

C1. Workshop: *Working with Robots (Teacher Training)*

This workshop introduces the methods that can be used to learn and improve algorithmic thinking, an essential challenge which is of particular importance in today's digital world. The "vehicle" for this enterprise are humanoid robots and their particular abilities: speech, hearing, motion, emotions and vision.

In the practical part, the participants will create simple robot applications on their notebooks/laptops and apply them to the robots.

Robot model/Software used: NAO robots, Choregraphe 2.1.4/2.8, Softbank Robotics.

Literature (German):

Handke Jürgen. 2020. *Humanoide Roboter in der Bildung.* Baden Baden: Tectum Verlag. 2.(to appear).

Video Playlist: https://bit.ly/2kZEFv8 (or QR-Code to the right)
Humanoide Roboter

Goals

The participants will
- get to know the options of using robots
- should create simple robot apps
- develop ideas for the use of robots in teaching and compile them into corresponding algorithms

Video References about Digitization (to be continued):
Playlist: The VLC Digitization Series https://bit.ly/1G94GZ3
(or CR-Code on the right)

- The Benefit of Digitization - Overview
- From Traditional to Digital
- New Scenarios - Free Your Lecture
- Teaching Problem Solving I - Serving Different Target Groups
- Teaching Problem Solving II - (Content) Quantity Assurance
- Teaching Problem Solving III - Quality Assurance
- The Benefits of Digitization - The Content/Multimedia
- The Student Perspective - Studiability: New Course Formats
- Six Steps - A Roadmap Towards Digitization in Linguistics
- Teaching and Learning – From Past to Future
- Controlling Access in Educational Videos
- Digitizing Linguistic Content

Videoreferences about "Educational Robotics" (partly in German)

Playlist: „H.E.A.R.T - Roboter in der Hochschullehre": https://bit.ly/2PbcLWI
(or CR-Code on the right)

- Humanoid Emotional Assistant Robots in Teaching
- Der Roboter als Infopoint
- Der Roboter als Quizmaster
- Der Roboter als Classmate
- Roboter in Bewegung
- Die Programmierung von Robotern
- Das Robotikum - KI hautnah
- Der Roboter erkennt Gesichter
- Erstkontakt mit dem Roboter

Single Videos about "Educational Robotics" (English)

- H.E.A.R.T. – Part I: Overview, https://youtu.be/GUIjGektFW4
- H.E.A.R.T. – Part II: Robot Apps for the Classroom, https://youtu.be/_U9JSa9EYZ0

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About Jürgen Handke (partly from Wikipedia)

Jürgen Handke is a German Professor for English Linguistics and Web Technology.

A pioneer of digital teaching and way ahead of his time Handke started to introduce innovative, digital and interactive teaching methods in the form of CD-ROMs in the early 1990s. This new way of teaching resulted in the creation of the world's first and largest e-learning platform for linguistics, the Virtual Linguistics Campus (VLC) in 2000. The VLC offers more than 500 fully certified linguistic courses and course material for theoretical and applied linguistics, ranging from introductory classes such as Phonology, Morphology, Syntax und Semantics to highly specialised courses such as 'Human Language Technologies'. Currently, the VLC has more than 17,000 active users with more than 3,000 visitors daily. Since 2014 the VLC has hosted the world's first pMOOC-curriculum with currently more than 7,000 active participants (pMOOC: https://youtu.be/DO9LNOyKOnA)

In 2013, Handke started the Virtual Linguistics Campus YouTube channel, now the largest linguistics channel in the world with more than 5 million clicks and more than 55,000 users and more than 500 videos, which all involve the CC BY licensing model.

Since 2012 Handke published several books about modern teaching, the most influential ones are 2012 'E-Learning, E-Teaching and E-Assessment', 2014 'Patient Hochschullehre' and 2015 'Handbuch Hochschullehre Digital' (2nd ed. 2017)

In 2013 Handke received the highest Hessian Teaching and Learning Award for his Inverted Classroom Mastery Model, in October 2015 he was awarded the highest German teaching award, Ars Legendi Prize for Digital Teaching and Learning. 2016 he received the DIE-prize for his MOOC #DEU4ARAB and in 2017 he received the national OER-Award for his MOOC FIT4UNI. 2019 Handke was awarded the prize "Science in Dialogue" for his communication concept "Robotikum".

Handke is a member of the national board "Hochschulforum Digitalisierung" and of the advisory board for the foundation of the new TU Nuremberg. In 2017, he started using humanoid robots in digital teaching and learning scenarios (state government funded project H.E.A.R.T), in 2019 he added another educational robot project RoboPraX.

Websites:

- The Virtual Linguistics Campus: http://www.linguisticsw-online.com
- The Virtual Linguistics Campus (YouTube): https://www.youtube.com/linguisticsmarburg
- Facebook: https://www.facebook.com/juergen.handke.33
- Twitter: https://twitter.com/juergen_handke
- 3M-solutions: https://3m-solutions.de
- H.E.A.R.T.: https://www.project-heart.de

Short Version (940 symbols incl. spaces):

Jürgen Handke, Professor of linguistics at Marburg University, runs the Virtual Linguistics Campus, the world's largest learning platform for linguistic content. Its associated YouTube channel contains hundreds of freely available self-produced instructional videos and is the largest of its kind.

Handke is the main German representative of the Inverted Classroom Model. In 2013 Handke received the highest Hessian Teaching and Learning Award for his Inverted Classroom Mastery Model, in October 2015 he was awarded the highest German teaching award, Ars Legendi Prize for Digital Teaching and Learning. 2016 he was awarded the DIE-prize for his MOOC #DEU4ARAB and 2019 the award "Science in Dialogue",

Handke is a member of the national board "Hochschulforum Digitalisierung" and of the advisory board for the foundation of the new TU Nuremberg. In 2017, he started using humanoid robots in digital teaching and learning scenarios (state government funded project H.E.A.R.T), in 2019 he added the second educational robot project RoboPraX.