University of Augsburg

Module Catalogue

Research on Learning and Instruction: An Interdisciplinary Program

Faculty of Philosophy and Social Sciences

You can see the other use cases of the modules in Digicampus.

Index by Module Groups

1) Theories and Evidence of Research on Learning and Instruction
Version 1

PSY-5111: Theoretical Approaches to Research on Learning and Instruction (6 ECTS/LP) * 4

PSY-5112: Core Skills within Research on Learning and Instruction (6 ECTS/LP) * 6

PSY-5113: Debating Research on Learning and Instruction (6 ECTS/LP) 8

PSY-5114: Recent Findings of Research on Learning and Instruction (6 ECTS/LP) * 10

2) Methods of Research on Learning and Instruction
Version 1

PSY-5121: Introduction to Empirical Research Methods (6 ECTS/LP) * 12

PSY-5122: Measurement and Assessment Methods (8 ECTS/LP) * 14

PSY-5123: Data Analysis Methods (8 ECTS/LP) 16

PSY-5124: Mixed Methods (8 ECTS/LP) * 18

PSY-5125: Research Internship (4 ECTS/LP) 20

3) Cognitive and Instructional Processes in Learning and Instruction
Version 1

PSY-5131: Research Project on Cognition and Instruction – Part 1 (8 ECTS/LP) 22

PSY-5132: Research Project on Cognition and Instruction – Part 2 (8 ECTS/LP) * 24

4) Motivational and Emotional Processes in Learning and Instruction
Version 1

PSY-5141: Research Project on Motivation and Emotion – Part 1 (8 ECTS/LP) 26

PSY-5142: Research Project on Motivation and Emotion – Part 2 (8 ECTS/LP) * 28

5) Teaching and Learning with Media
Version 1

PSY-5151: Research Project on Teaching and Learning with Media – Part 1 (8 ECTS/LP) 30

PSY-5152: Research Project on Teaching and Learning – Part 2 (8 ECTS/LP) * 32

6) Teacher Professionalism and Heterogeneity
Version 1

GPD-5161: Research Project on Teacher Professionalism and Heterogeneity – Part 1 (8 ECTS/LP) 34

GPD-5162: Research Project on Teacher Professionalism and Heterogeneity – Part 2 (8 ECTS/LP) *..... 36

7) Technology-supported Assessment and Facilitation of Learning and Instruction

Version 1

PSY-5171: Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 1 (8 ECTS/LP)..... 38

PSY-5172: Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 2 (8 ECTS/LP) *.....40

8) Master’s Thesis

Version 1

PSY-5181: Master’s Thesis (27 ECTS/LP).....42

PSY-5182: Master’s Colloquium (3 ECTS/LP) *.....44

Module PSY-5111: Theoretical Approaches to Research on Learning and Instruction

6 ECTS/LP

Theoretical Approaches to Research on Learning and Instruction

Version 1.0.0
Person responsible for module: Prof. Dr. Ingo Kollar
Prof. Dr. Markus Dresel

Contents:
Educational and psychological approaches to research on learning and instruction - Discipline-specific benefits of interdisciplinary research collaborations - Teaching from educational and psychological perspectives - Cognitive perspectives on learning

Learning Outcomes / Competences:
The students are supposed to acquire a deep understanding ofthe distinct perspectives of the disciplines Psychology, Education, Media Didactics, and General Didactics o the phenomena of "Learning", "Teaching", and "Research". Furthermore, they are supposed to acquire an understanding of different perspectives on the phenomenon of "Interdisciplinarity" in the context of research on learning and instruction.

Remarks:
Together with the modules PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5113 “Debating Research on Learning and Instruction”, and PSY-5114 “Recent Findings of Research on Learning and Instruction”, this module is a mandatory part of the module group "Theories and Methods of Research on Learning and Instruction”. That way, this module lays the foundations for the module groups in the area “Specialization” (“Cognitive and Instructional Processes in Learning and Instruction”, “Motivational and Emotional Processes in Learning and Instruction”, “Teaching and Learning with Media”, “Teacher Professionalism and Heterogeneity”, and “Technology-supported Assessment and Facilitation of Learning and Instruction”). Students should complete this module in the first semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 180 h

Conditions: Basic Knowledge in Research of Learning and Instruction		**Credit Requirements:** Passing module exam
Frequency: annually	**Recommended Semester:** from 1.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Theoretical Approaches to Research on Learning and Instruction
Language: English / German

Lehr-/Lernmethoden:
Teacher presentations , student presentations, small groupp collaboration, reading scientific literatur

Literature:
Fischer, F., Hmelo-Silver, C. E., Goldman, S.R. & Reimann, P. (2018). International Handbook of the Learning Sciences. Routledge.

Sawyer, K.E. (2014). The Cambridge Handbook of the Learning Sciences. Cambridge University Press.

Slavin, R. E. (2018). Educational Psychology: Theory and Practice (12thedition). Pearson.

Assigned Courses:

Theoretical approaches to learning and instruction (seminar)

*(in attendance) *

Examination

PSY-5111 Theoretical Approaches to Research on Learning and Instruction

module exam, Term paper / length of examination: 6 weeks, graded

Examination Prerequisites:

The students participate in the seminar sessions, read the suggested literature, and search for literature for the topic of their seminar paper. The topic of the seminar paper needs to be confirmed by the seminar instructor.

Description:

The students write a 20-page term paper about a concrete problem related to research on learning and intruction. They include both important theories and empirical findings and critically evaluate them with repect to their disciplinary origins

Module PSY-5112: Core Skills within Research on Learning and Instruction

Core Skills within Research on Learning and Instruction

6 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Ingo Kollar
Dresel, Markus, Prof. Dr.

Contents:
This module focuses on recent topics related to learning and instruction that have a scientific and/or societal impact. To that end, this module involves an in-depth consideration of recent research evidence in the field of research on learning and instruction. The module also provides opportunities for the (further) development of scientific, personal, and social skills.

Learning Outcomes / Competences:
The students advance their knowledge and understanding of the state of research on learning and instruction, broaden their methodological skills. Also, they develop their basic scientific skills (regarding presenting, writing, and arguing) as well as personal and social skills further.

Remarks:
Together with the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5113 “Debating Research on Learning and Instruction”, and PSY-5114 “Recent Findings of Research on Learning and Instruction”, this module is a mandatory part of the module group "Theories and Methods of Research on Learning and Instruction”. That way, this module lays the foundations for the module groups in the area “Specialization” (“Cognitive and Instructional Processes in Learning and Instruction”, “Motivational and Emotional Processes in Learning and Instruction”, “Teaching and Learning with Media”, “Teacher Professionalism and Heterogeneity”, and “Technology-supported Assessment and Facilitation of Learning and Instruction”). Students should complete this module in the first semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 180 h

Conditions: Basic knowledge in research of learning and instruction		**Credit Requirements:** Passing modul exam
Frequency: annually	**Recommended Semester:** from 1.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Core Skills within Research on Learning and Instruction
Language: English / German

Lehr-/Lernmethoden:
Presentations, readings, and discussions of recent research articles, workshops on academic writing and academic presenting, plenary discussions. This seminar takes place as an academic retreat in a venue outside of the university.

Literature:
American Psychological Association (2020). Publication manual of the American Psychological Association. APA.

Bailey, S. (2015). Academic writing – a handbook for international students. Routledge.

Beins, A. M. & Beins, B. C. (2021). Effective writing in psychology. Wylie.

Assigned Courses:

Core skills within research on learning and instruction (seminar)
*(in attendance) *

Examination

PSY-5112 *Core Skills within Research on Learning and Instruction

module exam, Portfolio (oral presentation of scientific article, writing review, written assignments) / work period for assignment: 6 weeks, graded

Test Frequency:

when a course is offered

Examination Prerequisites:

The students read scientific literature and actively participate at the academic retreat.

Description:

The students present an empirical research article. In addition, they write a critical, scientific review of this article. Furthermore, they complete written assignments in the context of workshops on academic writing and academic presenting.

Module PSY-5113: Debating Research on Learning and Instruction *Debating Research on Learning and Instruction*	6 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Ingo Kollar
Dresel, Markus, Prof.Dr.

Contents:
This module focuses on strategies that are necessary to read and assess articles from research on learning and instruction. Students read a selection of articles from different text genres, all coming from research on learning and instruction. These articles are intensively discussed with respect to their goals, main ideas, theoretical background, methods, results, and their interpretation.

Learning Outcomes / Competences:
The students advance their knowledge of theories and evidence on different topics that are covered in research on learning and instruction. They also develop their skills in reading, analysing, and assessing papers, articles, and chapters from research on learning and instruction further.

Remarks:
Together with the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, and PSY-5114 “Recent Findings of Research on Learning and Instruction”, this module is a mandatory part of the module group "Theories and Methods of Research on Learning and Instruction”. It accompanies students’ own empirical project work in the two “Specialization” areas they select in the electives (“Cognitive and Instructional Processes in Learning and Instruction”, “Motivational and Emotional Processes in Learning and Instruction”, “Teaching and Learning with Media”, “Teacher Professionalism and Heterogeneity”, and “Technology-supported Assessment and Facilitation of Learning and Instruction”) and helps them to contextualize their own research within the broader context of current international research on learning and instruction. Students should complete this module in the second semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 180 h

Conditions: Basic knowledge in research of learning and instruction		**Credit Requirements:** passing module exam
Frequency: annually	**Recommended Semester:** from 2.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Debating Research on Learning and Instruction
Language: English / German

Lehr-/Lernmethoden:
Project-oriented work, student presentations, small group learning, reading scientific literature, plenary discussions

Literature:
Field, A. & Hole, G. (2003). How to design and report experiments. SAGE.

Fischer, F., Hmelo-Silver, C. E., Goldman, S. R. & Reimann, P. (2018). International Handbook of the Learning Sciences (section III: Research, assessment, and analytic methods). Routledge.

Examination

PSY-5113 Debating Research on Learning and Instruction

module exam, Portfolio (written assignments, scientific presentations) / work period for assignment: 15 weeks, graded

Examination Prerequisites:

Over the course of the semester, the students read several empirical research articles. For each article, they complete a written assignment.

Description:

The exam consists of the total of written assignments that students complete over the course of the semester. In their assignments, students apply scientific criteria to critically assess the quality of the empirical research articles they read over the course of the semester.

Module PSY-5114: Recent Findings of Research on Learning and Instruction *Recent Findings of Research on Learning and Instruction*	6 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Ingo Kollar
Dresel, Markus, Prof. Dr.

Contents:
This module focusses on evidence and perspectives from the different disciplines that contribute to research on learning and instruction. This specifically applies to Educational Psychology, Educational Science, Primary Education, School Education, and Media Didactics.

Learning Outcomes / Competences:
The students should expand their knowledge and understanding of different mono-, multi-, and interdisciplinary perspectives on phenomena that are covered by research on learning and instruction. Furthermore, they should develop an overview over the state of research on a set of crucial topics from research on learning and instruction.

Remarks:
Together with the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, and PSY-5113 “Debating Research on Learning and Instruction”, this module is a mandatory part of the module group "Theories and Methods of Research on Learning and Instruction”. It accompanies students’ own empirical project work in the two “Specialization” areas they select in the electives (“Cognitive and Instructional Processes in Learning and Instruction”, “Motivational and Emotional Processes in Learning and Instruction”, “Teaching and Learning with Media”, “Teacher Professionalism and Heterogeneity”, and “Technology-supported Assessment and Facilitation of Learning and Instruction”) and helps them to contextualize their own research within the broader context of current international research on learning and instruction. Students should complete this module in the third semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 180 h

Conditions: Basic knowledge in research of learning and instruction		**Credit Requirements:** passing module exam
Frequency: annually	**Recommended Semester:** from 3.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Recent Findings of Research on Learning and Instruction
Language: English / German

Lehr-/Lernmethoden:
Research talks with discussion, separate discussions with presenters and guests

Literature:
Fischer, F., Hmelo-Silver, C. E., Goldman, S.R. & Reimann, P. (2018). International Handbook of the Learning Sciences. Routledge.

Sawyer, K.E. (2014). The Cambridge Handbook of the Learning Sciences. Cambridge University Press.

Slavin, R. E. (2018). Educational Psychology: Theory and Practice (12th edition). Pearson.

Assigned Courses:

Psychological Research Colloquium (seminar)
*(hybrid/mixed) *

Examination

PSY-5114 Recent Findings of Research on Learning and Instruction

module exam, term paper / work period for assignment: 6 weeks, graded

Examination Prerequisites:

The students attend scientific presentations and discussions with speakers and guests, and read papers associated to the presentations.

Description:

The students write a term paper (20-25 pages) that consists of two parts: In-depth description of the research area of one selected scientific presentation, short summary of one further presentation.

Module PSY-5121: Introduction to Empirical Research Methods *Introduction to Empirical Research Methods*	6 ECTS/LP
Version 1.0.0 Person responsible for module: Prof. Dr. Markus Dresel Gegenfurtner, Andreas, Prof. Dr.	
Contents: This module focuses on the basic methodological principles and processes of empirical research on learning and instruction. It helps develop a basic understanding of statistical methods for the analysis of data that were gathered in the context of learning and instruction. These data refer to persons, processes, outcomes, and environmental conditions of learning and instruction. The module also focuses on when to use what methods, and how to critically assess their benefits and limitations.	
Learning Outcomes / Competences: Students acquire basic methodological skills that are necessary for an assessment of psychological and educational constructs that are relevant for learning and instruction, and further develop their data analysis skills.	
Remarks: Together with the modules PSY-5122 “Measurement and Assessment Methods”, PSY-5123 “Data Analysis Methods”, PSY-5124 “Mixed Methods”, and PSY-5125 “Research Internship”, this module belongs to the module group “Methods of Research on Learning and Instruction”. It lays the foundations for the more advanced modules in this module group and prepares students for their own research projects within the elective module groups in the area “Specialization” (“Cognitive and Instructional Processes in Learning and Instruction”, “Motivational and Emotional Processes in Learning and Instruction”, “Teaching and Learning with Media”, “Teacher Professionalism and Heterogeneity”, and “Technology-supported Assessment and Facilitation of Learning and Instruction”). Students should complete this module in the first semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.	
Workload: Total: 180 h	

Conditions: Basic knowledge of empirical research methods		**Credit Requirements:** passing module exam
Frequency: annually	**Recommended Semester:** from 1.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Introduction to Empirical Research Methods
Language: English / German

Lehr-/Lernmethoden:
Teacher presentations, student presentations, small group collaboration, reading scientific literature

Literature:
Field, A. & Hole, G. (2003). How to design and report experiments. SAGE.

Fischer, F., Hmelo-Silver, C. E., Goldman, S. R. & Reimann, P. (2018). International Handbook of the Learning Sciences (section III: Research, assessment, and analytic methods). Routledge.

Assigned Courses:

Introduction to Empirical Research Methods (seminar)
**(in attendance) **

Examination

PSY-5121 Introduction to Empirical Research Methods

module exam, Portfolioprüfung / work period for assignment: 6 weeks, graded

Examination Prerequisites:

The students participate in the seminar sessions, work with the suggested statistics software (Excel, SPSS, R, Mondrian), read the suggested literature, and search for further literature.

Description:

The students write a 15-page term paper about a concrete problem related to research on learning and instruction. In this context, they apply the assessment and data analysis methods they encountered in the course. In their term papers, students critically discuss theories and evidence with respect to their validity and applicability to the topic of their paper.

Module PSY-5122: Measurement and Assessment Methods *Measurement and Assessment Methods*	8 ECTS/LP
Version 1.0.0 Person responsible for module: Prof. Dr. Markus Dresel Gegenfurtner, Andreas, Prof. Dr.	
Learning Outcomes / Competences: Students deepen their knowledge and understanding of empirical methods for the assessment of person-related, process-related, and environmental constructs in the context of research on learning and instruction. They also learn how to use these assessment methods in practice.	
Remarks: Together with the modules PSY-5121 “Introduction to Empirical Research Methods”, PSY-5123 “Data Analysis Methods”, PSY-5124 “Mixed Methods”, and PSY-5125 “Research Internship”, this module belongs to the module group “Methods of Research on Learning and Instruction”. It is an important basis for the students’ empirical research projects within the elective module groups in the area “Specialization” (“Cognitive and Instructional Processes in Learning and Instruction”, “Motivational and Emotional Processes in Learning and Instruction”, “Teaching and Learning with Media”, “Teacher Professionalism and Heterogeneity”, and “Technology-supported Assessment and Facilitation of Learning and Instruction”). Students should complete this module in the first semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.	
Workload: Total: 240 h	
Conditions: Basic knowledge of empirical research methods	**Credit Requirements:** passing module exam

Frequency: annually	**Recommended Semester:** from 1.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 4,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Measurement and Assessment Methods
Language: English / German

Lehr-/Lernmethoden:
Teacher presentations, student presentations, small group collaboration, flipped classroom elements, reading scientific literature

Literature:
Kline, P. (2015). A handbook of test construction – introduction to psychometric design. Routledge.

Leavy, P. (2004). The Oxford handbook of qualitative research. Oxford University Press.

Assigned Courses:

Measurement and Assessment Methods (seminar)
**(in attendance) **

Measurement and Assessment Methods ()
**(in attendance) **

Examination

Measurement and Assessment Methods

module exam, Portfolio (assignments, lesson design, presentation) / work period for assignment: 12 weeks, graded

Examination Prerequisites:

The students participate in the seminar sessions, read the suggested literature, and search for further literature.

Description:

The students complete written assignments over the course of the semester. Further, the students prepare one seminar session or a presentation on one particular assessment method and its particular strengths and limitations related to research on learning and instruction.

Module PSY-5123: Data Analysis Methods *Data Analysis Methods*	8 ECTS/LP
Version 1.1.0 Person responsible for module: Prof. Dr. Markus Dresel Gegenfurtner, Andreas, Prof. Dr.	
Contents: This module focuses on quantitative, i.e. statistical methods of data analysis within research on learning and instruction. It has students work with state-of-the-art programs such as SPSS or R. It also talks about concepts such as inferential statistics, significance testing, and multivariate methods. These topics are covered in the context of recent research on learning and instruction.	
Learning Outcomes / Competences: Students deepen their knowledge and understanding of statistical data analysis methods based on person-related, process-related, and environmental data in the context of research on learning and instruction. They also learn how to use and to critically assess these statistical methods in practice.	
Remarks: Together with the modules PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods”, PSY-5124 “Mixed Methods”, and PSY-5125 “Research Internship”, this module belongs to the module group “Methods of Research on Learning and Instruction”. It builds on the module PSY-5121 “Introduction to Empirical Research Methods” and PSY-5122 “Measurement and Assessment Methods”, as students analyse data that have been collected with the methods described in these previous courses to arrive at empirical conclusions for specific research questions. This module is also an important basis for the students’ empirical research projects within the elective module groups in the area “Specialization” (“Cognitive and Instructional Processes in Learning and Instruction”, “Motivational and Emotional Processes in Learning and Instruction”, “Teaching and Learning with Media”, “Teacher Professionalism and Heterogeneity”, and “Technology-supported Assessment and Facilitation of Learning and Instruction”). Students should complete this module in the first semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.	
Workload: Total: 240 h	

Conditions: Basic knowledge of empirical research methods		**Credit Requirements:** passing module exam
Frequency: annually	**Recommended Semester:** from 2.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 4,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module
Part of the Module: Data Analysis Methods **Language:** English / German **Frequency:** annually
Lehr-/Lernmethoden: Teacher presentations, student presentations, small group collaboration, reading scientific literature

Literature:

Field, A. (2018). Discovering statistics using IBM SPSS statistics. Sage.

Field, A. (2018). Discovering statistics using R. Sage.

Theus, M., & Urbanek, S. (2009). Interactive graphics for data analysis: Principles and examples. CRC Press.

Unwin, A., Theus, M. & Hofmann, H. (2006). Graphics of Large Datasets: Visualizing a Million. Springer.

Examination

PSY-5123 Data Analysis Methods

module exam, Term paper / work period for assignment: 6 weeks, graded

Examination Prerequisites:

The students participate in the seminar sessions, read the suggested literature, and search for further literature.

Description:

The students write a term paper (about 20 pages) on a concrete problem of research on learning and instruction. The term paper builds on prominent theories and empirical evidence and students critically appraise the way this evidence was produced by assessing the adequacy and limitations of the methods that were used to analyse the data.

Module PSY-5124: Mixed Methods *Mixed Methods*	8 ECTS/LP
Version 1.0.0 Person responsible for module: Prof. Dr. Markus Dresel Gegenfurtner, Andreas, Prof. Dr.	
Contents: This module focuses on when and how to combine quantitative and qualitative research methods in research on learning and instruction. It does so by pointing out the limitations of different qualitative and quantitative assessment and analysis methods, and discussing how to complement these methods with methods from the other side of the spectrum.	
Learning Outcomes / Competences: Students deepen their knowledge and understanding of the limitations of different quantitative and qualitative research methods and when and how to combine them with methods from the other end of the spectrum to answer research questions from the field of learning and instruction. They also learn how to use and to critically assess combinations of these methods in practice.	
Remarks: Together with the modules PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods”, PSY-5123 “Data Analysis Methods”, and PSY-5125 “Research Internship”, this module belongs to the module group “Methods of Research on Learning and Instruction”. It builds on the modules PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods”, and PSY-5123 “Data Analysis Methods”, as it has students critically evaluate the pros and cons of different qualitative and quantitative methods for the assessment and analysis of data in research on learning and instruction. This module is also an important basis for the students’ empirical research projects within the elective module groups in the area “Specialization” (“Cognitive and Instructional Processes in Learning and Instruction”, “Motivational and Emotional Processes in Learning and Instruction”, “Teaching and Learning with Media”, “Teacher Professionalism and Heterogeneity”, and “Technology-supported Assessment and Facilitation of Learning and Instruction”). Students should complete this module in the third semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.	
Workload: Total: 240 h	

Conditions: Basic knowledge of empirical research methods		**Credit Requirements:** Passing module exam
Frequency: annually	**Recommended Semester:** from 3.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 4,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module
Part of the Module: Mixed Methods **Language:** English / German
Lehr-/Lernmethoden: Teacher presentations, student presentations, small group collaboration, reading scientific literature
Literature: Eid, M., & Diener, E. (Eds.). (2006). *Handbook of multimethod measurement in psychology.* American Psychological Association.
Assigned Courses:

Mixed Methods (seminar)
*(in attendance) *

Mixed Methods ()
*(in attendance) *

Examination

PSY-5124 Mixed Methods
module exam, term paper / work period for assignment: 6 weeks, graded

Module PSY-5125: Research Internship	4 ECTS/LP
Version 1.0.0 Person responsible for module: Prof. Dr. Ingo Kollar Dresel, Markus, Prof. Dr.	
Contents: The students do a research internship at an institution that is active in the field of research on learning and instruction. The internship has a volume of 120 hours.	
Learning Outcomes / Competences: Students deepen their practical skills related to running empirical research in the field of learning and instruction, with a particular focus on person-related, process-related, and environmental constructs, their assessment, and the analysis of such data in relation to specific research questions. They do so by participating in authentic project teams that aim at answering relevant questions within research on learning and instruction.	
Remarks: Together with the modules PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods”, PSY-5123 “Data Analysis Methods”, and PSY-5124 “Mixed Methods”, this module belongs to the module group “Methods of Research on Learning and Instruction”. It is supposed to provide students a first opportunity to make first-hand experiences with research on learning and instruction. It is therefore an important basis for the students’ empirical research projects within the elective module groups in the area “Specialization” (“Cognitive and Instructional Processes in Learning and Instruction”, “Motivational and Emotional Processes in Learning and Instruction”, “Teaching and Learning with Media”, “Teacher Professionalism and Heterogeneity”, and “Technology-supported Assessment and Facilitation of Learning and Instruction”). Students should complete this module in the first semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.	
Workload: Total: 120 h	
Conditions: Basic knowledge of empirical research methods	**Credit Requirements:** passing module exam
Frequency: annually	**Recommended Semester:** from 1.	**Minimal Duration of the Module:** 1 semester[s]
	Repeat Exams Permitted: according to the examination regulations of the study program	

Parts of the Module
Part of the Module: Research Internship **Language:** English / German
Lehr-/Lernmethoden: Project work within teams
Literature: Eid, M., & Diener, E. (Eds.). (2006). *Handbook of multimethod measurement in psychology.* American Psychological Association. Field, A. (2018). Discovering statistics using IBM SPSS statistics. Sage. Field, A. (2018). Discovering statistics using R. Sage. Kline, P. (2015). A handbook of test construction – introduction to psychometric design. Routledge. Leavy, P. (2004). The Oxford handbook of qualitative research. Oxford University Press.

Examination

PSY-5125 Research Internship

module exam, internship report / work period for assignment: 6 weeks, graded

Examination Prerequisites:

After receiving approval from a research internship, students do an internship at an institution that is active in the field of research on learning and instruction.

Description:

The students write an internship report of about 5 pages, detailing their tasks during the internship and reflecting on the question to what extent the internship helped them develop their research skills further.

Module PSY-5131: Research Project on Cognition and Instruction – Part 1 *Research Project on Cognition and Instruction – Part 1*	8 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Ingo Kollar
Bredl, Klaus, Prof. Dr.

Contents:
In this module, students run a research project that answers research questions related to cognitive and/or instructional aspects of learning and instruction. This includes setting up research questions and hypotheses, establishing a research design, developing instruments for the assessment of relevant constructs, and analysing data by aid of appropriate empirical research methods.

Learning Outcomes / Competences:
Students learn how to plan and run a research project on cognitive and instructional processes of learning and instruction. In this process, they apply their knowledge and skills on relevant theories and empirical insights from related research, as well as their methodological skills. Furthermore, they expand their basic scientific skills related to academic writing, presenting, and collaborating.

Remarks:
Together with module PSY-5132 “Research Project on Cognition and Instruction – Part 2”, this module belongs to the elective module group “Cognitive and Instructional Processes of Learning and Instruction”. Students should have completed the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods” before taking this module. Students are further recommended to take this module in the second semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 240 h

Conditions:		**Credit Requirements:**
Basic knowledge of research on learning and instruction		Passing module exam
Frequency: annually	**Recommended Semester:** from 2.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Research Project on Cognition and Instruction – Part 1
Language: English / German

Lehr-/Lernmethoden:
Project-oriented work, student presentations, small group work, reading scientific literature

Literature:
Fischer, F., Hmelo-Silver, C. E., Goldman, S.R. & Reimann, P. (2018). International Handbook of the Learning Sciences. Routledge.

Sawyer, K.E. (2014). The Cambridge Handbook of the Learning Sciences. Cambridge University Press.

Van Merrienboer, J.J.G. & Kirschner, P.A. (2017). Ten steps to complex learning. Taylor & Francis.

Examination

PSY-5131 Research Project on Cognition and Instruction – Part 1

module exam, Portfolio (oral status reports, poster presentation, discussion / length of examination: 30 minutes, graded

Examination Prerequisites:

With guidance by the instructor, students run an empirical study. They create a poster that presents the current state of the empirical study and prepare for possible questions during the poster session.

Description:

The students present the current state of their empirical study by presenting a poster within a short time frame of about 1 minute. After that, they are available for further questions on their project.

Module PSY-5132: Research Project on Cognition and Instruction – Part 2 *Research Project on Cognition and Instruction – Part 2*	8 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Ingo Kollar
Bredl, Klaus, Prof. Dr.

Contents:
In this module, students continue the research project on cognitive and/or instructional processes of learning and instruction they have started in module PSY-5131 “Research Project on Cognition and Instruction – Part I”. The emphasis is on the statistical analysis and theory-based interpretation of the results of the students’ own empirical research.

Learning Outcomes / Competences:
Students learn how to analyse and interpret the data from their research project on cognitive and instructional processes of learning and instruction. Thereby, they extend and expand their pre-existing content-specific and methodological research skills. In addition, the develop their basic academic skills (academic writing, academic presenting, collaborating) further.

Remarks:
Together with module PSY-5131 “Research Project on Cognition and Instruction – Part 1”, this module belongs to the elective module group “Cognitive and Instructional Processes in Learning and Instruction”. Students should have completed the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods”, and PSY-5131 “Research Project on Cognition and Instruction – Part I” before taking this module. Students are further recommended to take this module in the third semester.
This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 240 h

Conditions: Basic knowledge of research on learning and instruction		**Credit Requirements:** Passing module exam
Frequency: annually	**Recommended Semester:** from 3.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Research Project on Cognition and Instruction – Part 2
Language: English / German
Frequency: annually

Lehr-/Lernmethoden:
Project-oriented work, student presentations, small group work, reading scientific literature

Literature:

Fischer, F., Hmelo-Silver, C. E., Goldman, S.R. & Reimann, P. (2018). International Handbook of the Learning Sciences. Routledge.

Mayer, R. (2020). *Multimedia Learning* (3rd ed.). Cambridge: Cambridge University Press. doi:10.1017/9781316941355

Sawyer, K.E. (2014). The Cambridge Handbook of the Learning Sciences. Cambridge University Press.

Van Merrienboer, J.J.G. & Kirschner, P.A. (2017). Ten steps to complex learning. Taylor & Francis.

Assigned Courses:

Research Project on Cognition and Instruction - Part 2 (seminar)
*(in attendance) *

Examination

PSY-5132 Research Project on Cognition and Instruction – Part 2

module exam, research report / work period for assignment: 6 weeks, graded

Examination Prerequisites:

With guidance by the instructors, students run an empirical study.

Description:

The students write a research report of about 20 pages that gives an overview over the research project. It includes a problem statement, a theoretical section, a section of research questions and hypotheses, a methods, results, and discussion section. The research report concludes with a chapter on limitations and conclusions.

Module PSY-5141: Research Project on Motivation and Emotion – Part 1 *Research Project on Motivation and Emotion – Part 1*	8 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Markus Dresel
Nett, Ulrike, Prof. Dr.

Contents:
In this module, students run a research project that answers research questions related to motivational and/ or emotional aspects of learning and instruction. This includes setting up research questions and hypotheses, establishing a research design, developing instruments for the assessment of relevant constructs, and analysing data by aid of appropriate empirical research methods.

Learning Outcomes / Competences:
Students learn how to plan and run a research project on motivational and emotional processes of learning and instruction. In this process, they apply their knowledge and skills on relevant theories and empirical insights from related research, as well as their methodological skills. Furthermore, they expand their basic scientific skills related to academic writing, presenting, and collaborating.

Remarks:
Together with module PSY-5142 “Research Project on Motivation and Emotion – Part 2”, this module belongs to the elective module group “Motivational and Emotional Processes in Learning and Instruction”. Students should have completed the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods” before taking this module. Students are further recommended to take this module in the second semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 240 h

Conditions: Basic knowledge of research on learning and instruction		**Credit Requirements:** Passing module exam
Frequency: annually	**Recommended Semester:** from 2.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Research Project on Motivation and Emotion – Part 1
Language: English / German

Lehr-/Lernmethoden:
Project-oriented work, student presentations, small group work, reading scientific literature

Literature:
Hall, N. & Götz, T. (Eds.). (2013). Emotion, motivation, and self-regulation: A handbook for teachers. Bingley, UK: Emerald.

Schunk, D. H., Pintrich, P. R. & Meece, J. (Eds.). (2008). Motivation in education: Theory, research, and applications (3rd ed.). Pearson/Merrill Prentice Hall.

Examination

PSY-5141 Research Project on Motivation and Emotion – Part 1

module exam, Portfolio (oral status reports, presentation) / length of examination: 30 minutes, graded

Examination Prerequisites:

With guidance by the instructor, students run an empirical study. They develop question to their own study, and read scientific literature.

Description:

The students give several oral status reports on their project over the course of the semester. They also give an oral presentation of their study and answer questions related to their project.

Module PSY-5142: Research Project on Motivation and Emotion – Part 2 *Research Project on Motivation and Emotion – Part 2*	8 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Markus Dresel
Nett, Ulrike, Prof. Dr.

Contents:
In this module, students continue the research project on motivational and/or emotional processes of learning and instruction they have started in module PSY-5141 “Research Project on Motivation and Emotion – Part I”. The emphasis is on the statistical analysis and theory-based interpretation of the results of the students’ own empirical research.

Learning Outcomes / Competences:
Students learn how to analyse and interpret the data from their research project on motivational and emotional processes of learning and instruction. Thereby, they extend and expand their pre-existing content-specific and methodological research skills. In addition, the develop their basic academic skills (academic writing, academic presenting, collaborating) further.

Remarks:
Together with module PSY-5141 “Research Project on Motivation and Emotion – Part 1”, this module belongs to the elective module group “Emotional and Motivational Processes in Learning and Instruction”. Students should have completed the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods”, and PSY-5141 “Research Project on Motivation and Emotion – Part I” before taking this module. Students are further recommended to take this module in the third semester.
This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 240 h

Conditions: Basic knowledge of research on learning and instruction		**Credit Requirements:** Passing module exam
Frequency: annually	**Recommended Semester:** from 3.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Research Project on Motivation and Emotion – Part 2
Language: English / German
Frequency: annually

Lehr-/Lernmethoden:
Project-oriented work, student presentations, teacher presentations, small group work, reading scientific literature

Literature:
Hall, N. & Götz, T. (Eds.). (2013). Emotion, motivation, and self-regulation: A handbook for teachers. Bingley, UK: Emerald.

Schunk, D. H., Pintrich, P. R. & Meece, J. (Eds.). (2008). Motivation in education: Theory, research, and applications (3rd ed.). Pearson/Merrill Prentice Hall.

Assigned Courses:

Research Project on Motivation and Emotion, Part 2 (seminar)
*(in attendance) *

Examination

PSY-5142 Research Project on Motivation and Emotion – Part 2

module exam, research report / work period for assignment: 6 weeks, graded

Examination Prerequisites:

With guidance by the instructor, students run an empirical study.

Description:

The students write a research report of about 20 pages that gives an overview over the research project. It includes a problem statement, a theoretical section, a section of research questions and hypotheses, a methods, results, and discussion section. The research report concludes with a chapter on limitations and conclusions.

Module PSY-5151: Research Project on Teaching and Learning with Media – Part 1 *Research Project on Teaching and Learning with Media – Part 1*	8 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Klaus Bredl
Prof. Dr. Eva Matthes; Prof. Dr. Markus Dresel

Contents:
In this module, students run a research project that answers research questions related to teaching and learning with media. This includes setting up research questions and hypotheses, establishing a research design, developing instruments for the assessment of relevant constructs, and analysing data by aid of appropriate empirical research methods.

Learning Outcomes / Competences:
Students learn how to plan and run a research project in the area of teaching and learning with media. In this process, they apply their knowledge and skills on relevant theories and empirical insights from related research, as well as their methodological skills. Furthermore, they expand their basic scientific skills related to academic writing, presenting, and collaborating.

Remarks:
Together with module PSY-5152 “Research Project on Learning and Teaching with Media – Part 2”, this module belongs to the elective module group “Teaching and Learning with Media”. Students should have completed the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5115 “Introduction to Empirical Research Methods”, PSY-5116 “Measurement and Assessment Methods” before taking this module. Students are further recommended to take this module in the second semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 240 h

Conditions: Basic knowledge of research on learning and instruction		**Credit Requirements:** Passing module exam
Frequency: annually	**Recommended Semester:** from 2.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Research Project on Teaching and Learning with Media – Part 1
Language: English / German
Frequency: annually

Lehr-/Lernmethoden:
Project-oriented work, student presentations, small group work, reading scientific literature

Literature:

Anderson, T. & Shattuck, J. (2012). Design-based research: A decade of progress in education research? Educational Researcher, 41(1), 16-25.

Bredl, K. & Bösche, W. (2013) (Ed.). Serious Games and Virtual Worlds in Education, Professional Development, and Healthcare. Hershey, PA: IGI Global.

Garris, R., Ahlers, R. & Driskell, J. E. (2002). Games, Motivation and Learning: A Research and Practice Model. Simulation and Gaming, 33, 441-467.

Gee, J. (2009). Deep Learning Properties of Good Digital Games: How Far Can They Go? In U. Ritterfeld, M. Cody, P. Vorderer (Ed.). Serious Games. Mechanism and Effects (pp. 67-83). New York: Routledge.

Kerres, M. (2018). *Mediendidaktik: Konzeption und Entwicklung digitaler Lernangebote*. Berlin, Boston: De Gruyter Oldenbourg.

Knecht, P., Matthes, E., Schütze, S. & Aamotsbakken, B. (Hrsg.) (2014). Methodologie und Methoden der Schulbuch- und Lehrmittelforschung. Bad Heilbrunn: Klinkhardt.

Matthes, E., Heiland, T. & von Proff, A. (Hrsg.) (2019). Open Educational Resources (OER) im Lichte des Augsburger Analyse- und Evaluationsrasters (AAER). Bad Heilbrunn: Klinkhardt.

Matthes, E., Siegel, S. T., Heiland, T. (Hrsg.) (2021): Lehrvideos – das Bildungsmedium der Zukunft? Erziehungswissen-schaftliche und fachdidaktische Perspektiven. Bad Heilbrunn: Klinkhardt.

Mayer, R. (2020). *Multimedia Learning* (3rd ed.). Cambridge: Cambridge University Press. doi:10.1017/9781316941355

Examination

PSY-5151 Research Project on Teaching and Learning with Media – Part 1

module exam, portfolio (oral status reports, poster presentation, discussion) / length of examination: 30 minutes, graded

Examination Prerequisites:

With guidance by the instructor, students run an empirical study. They create a poster that presents the current state of the empirical study and prepare for possible questions during the poster session.

Description:

The students give an oral presentation or present a poster on their research project. The design of the presentation resp. the poster should be oriented on typical presentations and posters at scientific conferences. Further, students answer questions related to their project.

Module PSY-5152: Research Project on Teaching and Learning – Part 2 *Research Project on Teaching and Learning – Part 2*	8 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Klaus Bredl
Prof. Dr. Eva Matthes; Prof. Dr. Markus Dresel

Contents:
In this module, students continue the research project on teaching and learning with media they have started in module PSY-5151 “Research Project on Teaching and Learning with Media – Part I”. The emphasis is on the analysis and theory-based interpretation of the results of the students’ own empirical research.

Learning Outcomes / Competences:
Students learn how to analyse and interpret the data from their research project on teaching and learning with media. Thereby, they extend and expand their pre-existing content-specific and methodological research skills. In addition, they develop their basic academic skills (academic writing, academic presenting, collaborating) further.

Remarks:
Together with module PSY-5151 “Research Project on Learning and Teaching with Media – Part 1”, this module belongs to the elective module group “Learning and Teaching with Media”. Students should have completed the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods”, and PSY-5151 “Research Project on Teaching and Learning with Media – Part I” before taking this module. Students are further recommended to take this module in the third semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 240 h

Conditions:		**Credit Requirements:**
Basic knowledge of research on learning and instruction		Passing module exam
Frequency: annually	**Recommended Semester:** from 3.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Research Project on Teaching and Learning – Part 2
Language: English / German
Frequency: annually

Lehr-/Lernmethoden:
Project-oriented work, student presentations, teacher presentations, small group work, reading scientific literature

Literature:

Anderson, T. & Shattuck, J. (2012). Design-based research: A decade of progress in education research? Educational Researcher, 41(1), 16-25.

Bredl, K. & Bösche, W. (2013) (Ed.). Serious Games and Virtual Worlds in Education, Professional Development, and Healthcare. Hershey, PA: IGI Global.

Garris, R., Ahlers, R. & Driskell, J. E. (2002). Games, Motivation and Learning: A Research and Practice Model. Simulation and Gaming, 33, 441-467.

Gee, J. (2009). Deep Learning Properties of Good Digital Games: How Far Can They Go? In U. Ritterfeld, M. Cody, P. Vorderer (Ed.). Serious Games. Mechanism and Effects (pp. 67-83). New York: Routledge.

Kerres, M. (2018). *Mediendidaktik: Konzeption und Entwicklung digitaler Lernangebote*. Berlin, Boston: De Gruyter Oldenbourg.

Knecht, P., Matthes, E., Schütze, S. & Aamotsbakken, B. (Hrsg.) (2014). Methodologie und Methoden der Schulbuch- und Lehrmittelforschung. Bad Heilbrunn: Klinkhardt.

Matthes, E., Heiland, T. & von Proff, A. (Hrsg.) (2019). Open Educational Resources (OER) im Lichte des Augsburger Analyse- und Evaluationsrasters (AAER). Bad Heilbrunn: Klinkhardt.

Matthes, E., Siegel, S. T., Heiland, T. (Hrsg.) (2021): Lehrvideos – das Bildungsmedium der Zukunft? Erziehungswissen-schaftliche und fachdidaktische Perspektiven. Bad Heilbrunn: Klinkhardt.

Mayer, R. (2020). *Multimedia Learning* (3rd ed.). Cambridge: Cambridge University Press. doi:10.1017/9781316941355

Assigned Courses:

Research Project on Teaching and Learning with Media - Part 2 (seminar)

**(in attendance) **

Examination

PSY-5152 Research Project on Teaching and Learning – Part 2

module exam, research report / work period for assignment: 6 weeks, graded

Examination Prerequisites:

With guidance by the instructors, students run an empirical study.

Description:

The students write a research report of about 20 pages that gives an overview over the research project. It includes a problem statement, a theoretical section, a section of research questions and hypotheses, a methods, results, and discussion section. The research report concludes with a chapter on limitations and conclusions.

Module GPD-5161: Research Project on Teacher Professionalism and Heterogeneity – Part 1 *Research Project on Teacher Professionalism and Heterogeneity – Part 1*	8 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Andreas Hartinger
Prof. Dr. Andreas Gegenfurtner, Prof. Dr. Klaus Zierer

Contents:
In this module, students run a research project that answers research questions related to teacher professionalism and heterogeneity. This includes setting up research questions and hypotheses, establishing a research design, developing instruments for the assessment of relevant constructs, and analysing data by aid of appropriate empirical research methods.

Learning Outcomes / Competences:
Students learn how to plan and run a research project in the area of teacher professionalism and heterogeneity. In this process, they apply their knowledge and skills on relevant theories and empirical insights from related research, as well as their methodological skills. Furthermore, they expand their basic scientific skills related to academic writing, presenting, and collaborating.

Remarks:
Together with module GPD-5162 “Research Project on Teacher Professionalism and Heterogeneity – Part 2”, this module belongs to the elective module group “Teacher Professionalism and Heterogeneity”. Students should have completed the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5115 “Introduction to Empirical Research Methods”, PSY-5116 “Measurement and Assessment Methods” before taking this module. Students are further recommended to take this module in the second semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

For further information, please visit https://www.uni-augsburg.de/de/fakultaet/philsoz/studiengange-philsoz/illf/

Workload:
Total: 240 h

Conditions:	**Credit Requirements:**
Basic knowledge of research on learning and instruction	Passing module exam

Frequency: annually	**Recommended Semester:** from 2.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Research Project on Teacher Professionalism and Heterogeneity – Part 1
Language: English / German
Frequency: annually
Contact Hours: 2,00
ECTS Credits: 8.0

Lehr-/Lernmethoden:
Project-oriented work, student presentations, small group work, reading scientific literature

Literature:

Hattie, J. (Ed.) (2020). Visible learning guide to student achievement. London & New York, Routledge, Taylor & Francis Group. Hartinger, A., Dresel, M., Matthes, E., Nett, U., Peuschel, Kristina & Gegenfurtner, A. (Hrsg.) (2022). Lehrkräfteprofessionalität im Umgang mit Heterogenität – Theoretische Konzepte, Förderansätze, empirische Befunde. Münster & New York: Waxmann.

Examination

GPD-5161 Research Project on Teacher Professionalism and Heterogeneity – Part 1

module exam, Module exam, poster presentation incl. discussion / length of examination: 30 minutes, graded

Test Frequency:

when a course is offered

Examination Prerequisites:

With guidance by the instructor, students run an empirical study. They develop question to their own study, and read scientific literature.

Description:

The students present a poster and give a short oral presentation on their research project. Further, students answer questions related to their project.

Module GPD-5162: Research Project on Teacher Professionalism and Heterogeneity – Part 2 *Research Project on Teacher Professionalism and Heterogeneity – Part 2*	8 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Andreas Hartinger
Prof. Dr. Andreas Gegenfurtner, Prof. Dr. Klaus Zierer

Contents:
In this module, students continue the research project on teacher professionalism and heterogeneity they have started in module GPD-5161 “Research Project on Teacher Professionalism and Heterogeneity – Part I”. The emphasis is on the analysis and theory-based interpretation of the results of the students’ own empirical research.

Learning Outcomes / Competences:
Students learn how to analyse and interpret the data from their research project on teacher professionalism and heterogeneity. Thereby, they extend and expand their pre-existing content-specific and methodological research skills. In addition, the develop their basic academic skills (academic writing, academic presenting, collaborating) further.

Remarks:
Together with module GPD-5161 “Research Project on Teacher Professionalism and Heterogeneity – Part I”, this module belongs to the elective module group “Teacher Professionalism and Heterogeneity”. Students should have completed the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5115 “Introduction to Empirical Research Methods”, PSY-5116 “Measurement and Assessment Methods”, and GPD-5161 “Teacher Professionalism and Heterogeneity – Part I” before taking this module. Students are further recommended to take this module in the third semester.
This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

For further information, please visit https://www.uni-augsburg.de/de/fakultaet/philsoz/studiengange-philsoz/illf/

Workload:
Total: 240 h

Conditions:		**Credit Requirements:**
Basic knowledge of research on learning and instruction		Passing module exam
Frequency: annually	**Recommended Semester:** from 3.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Research Project on Teacher Professionalism and Heterogeneity – Part 2
Language: English / German
Frequency: annually
Contact Hours: 2,00
ECTS Credits: 8.0

Lehr-/Lernmethoden:
Project-oriented work, student presentations, teacher presentations, small group work, reading scientific literature

Literature:
Hattie, J. (Ed.) (2020). Visible learning guide to student achievement. London & New York, Routledge, Taylor & Francis Group. Hartinger, A., Dresel, M., Matthes, E., Nett, U., Peuschel, Kristina & Gegenfurtner, A. (Hrsg.) (2022). Lehrkräfteprofessionalität im Umgang mit Heterogenität – Theoretische Konzepte, Förderansätze, empirische Befunde. Münster & New York: Waxmann.

Assigned Courses:

Research Project on Teacher Professionalism and Heterogeneity - Part 2 (seminar)
**(in attendance) **

Examination

GPD-5162 Research Project on Teacher Professionalism and Heterogeneity – Part 2
module exam, Module exam, research report / length of examination: 6 weeks, graded

Test Frequency:
when a course is offered

Examination Prerequisites:
With guidance by the instructor, students run an empirical study.

Description:
The students write a research report of about 20 pages that gives an overview over the research project. It includes a problem statement, a theoretical section, a section of research questions and hypotheses, a methods, results, and discussion section. The research report concludes with a chapter on limitations and conclusions.

Module PSY-5171: Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 1 *Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 1*	8 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Ingo Kollar
Göritz, Anja, Prof. Dr.; Dresel, Markus, Prof. Dr.

Contents:
In this module, students run a research project that answers research questions related to the technology-supported assessment and facilitation of learning and instruction. This includes setting up research questions and hypotheses, establishing a research design, developing instruments for the assessment of relevant constructs, and analysing data using appropriate empirical research methods.

Learning Outcomes / Competences:
Students learn how to plan and run a research project on the technology-supported assessment and facilitation of learning and instruction. In this process, they apply their knowledge and skills on relevant theories and empirical insights from related research, as well as their methodological skills. Furthermore, they expand their basic scientific skills related to academic writing, presenting, and collaborating.

Remarks:
Together with module PSY-5172 “Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 2”, this module is part of the elective module group “Technology-supported Assessment and Facilitation of Learning and Instruction”. Students should have completed the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods” before taking this module. Students are recommended to take this module in the second semester.
This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 240 h

Conditions:		**Credit Requirements:**
Basic knowledge of research on learning and instruction		Passing module exam
Frequency: annually	**Recommended Semester:** from 2.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 1
Language: English / German
Frequency: annually

Lehr-/Lernmethoden:
Project-oriented work, student presentations, small group work, reading scientific literature

Literature:

Field, A. (2024). Discovering statistics using R and RStudio. Sage.

Matz, S. C. (2022). The psychology of technology: Social science research in the age of big data. American Psychological Association.

Romero-Hall, E. (ed) (2020). Research methods in learning design and technology. Routledge.

Examination

PSY-5171 Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 1

module exam, Portfolio (oral status reports, poster presentation, discussion) / length of examination: 30 minutes, graded

Examination Prerequisites:

With guidance by the instructor, students run an empirical study. They create a poster that presents the current state of the empirical study and prepare for answering questions during the poster session

Description:

The students present the state of their empirical study by presenting a poster within a short time frame of about 1 minute. After that, they are available for questions on their project.

Module PSY-5172: Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 2 *Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 2*	8 ECTS/LP

Version 1.0.0
Person responsible for module: Prof. Dr. Ingo Kollar
Göritz, Anja, Prof. Dr.; Dresel, Markus, Prof. Dr.

Contents:
In this module, students continue the research project on the technology-supported assessment and facilitation of learning and instruction they have started in module PSY-5171 “Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part I”. The emphasis is on the statistical analysis and theory-based interpretation of the results of the students’ empirical research.

Learning Outcomes / Competences:
Students learn how to analyse and interpret the data from their research project on the technology-supported assessment and facilitation of learning and instruction. Thereby, they extend and deepen their content-related and methodological research skills. In addition, they expand their academic skills (e.g., academic writing, presenting, collaborating).

Remarks:
Together with module PSY-5171 “Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 1”, this module is part of the elective module group “Technology-supported Assessment and Facilitation of Learning and Instruction”. Students should have completed the modules PSY-5111 “Theoretical Approaches to Research on Learning and Instruction”, PSY-5112 “Core Skills within Research on Learning and Instruction”, PSY-5121 “Introduction to Empirical Research Methods”, PSY-5122 “Measurement and Assessment Methods”, and PSY-5171 “Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part I” before taking this module. Students are recommended to take this module in the third semester. This module exclusively targets students from the Master’s program Research on Learning and Instruction: An Interdisciplinary Program“.

Workload:
Total: 240 h

Conditions: Basic knowledge of research on learning and instruction		**Credit Requirements:** Passing module exam
Frequency: annually	**Recommended Semester:** from 3.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 2
Language: English / German
Frequency: annually

Lehr-/Lernmethoden:
Project-oriented work, student presentations, small group work, reading scientific literature

Literature:

Beins, B. C. & Beins, A. M. (2020). Effective writing in psychology. Wiley-Blackwell.

Field, A. (2024). Discovering statistics using R and RStudio. Sage.

Matz, S. C. (2022). The psychology of technology: Social science research in the age of big data. American Psychological Association.

Romero-Hall, E. (ed) (2020). Research methods in learning design and technology. Routledge.

Assigned Courses:

Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction - Part 2 (seminar)

**(in attendance) **

Examination

PSY-5172 Research Project on Technology-supported Assessment and Facilitation of Learning and Instruction – Part 2

module exam, research report / work period for assignment: 6 weeks, graded

Examination Prerequisites:

With guidance by the instructor, students run an empirical study.

Description:

The students write a research report of about 20 pages that gives an overview of the research project. It includes a problem statement, a theory section, a section of research questions and hypotheses, a methods, results, and discussion section. The research report concludes with a chapter on limitations and conclusions.

Module PSY-5181: Master's Thesis *Master's Thesis*	27 ECTS/LP
Version 1.0.0 Person responsible for module: Prof. Dr. Ingo Kollar Dresel, Markus, Prof. Dr.	
Contents: The students independently run an empirical research project and write their Master's thesis about it.	
Learning Outcomes / Competences: Students should develop their skills and abilities regarding academic writing further. They should learn how to formulate a challenging research question from the field of learning and instruction and to answer this question by aid of a self-developed empirical study. In writing their thesis and analysing the results of their study, they are supposed to develop their understanding of theories and evidence as well as their methodological skills further.	
Remarks: Together with the module PSY-5182 "Master's Colloquium", this module is a mandatory part of the module group "Master's Thesis". Students are recommended to take this module once they have completed the two specializations including the two research projects they have selected in the elective modules. Students should complete this module in the fourth semester. This module exclusively targets students from the Master's program Research on Learning and Instruction: An Interdisciplinary Program".	
Workload: Total: 810 h	
Conditions: Knowledge of theories, evidence, and empirical methods of research on learning and instruction	**Credit Requirements:** Passing module exam

Frequency: annually	**Recommended Semester:** from 4.	**Minimal Duration of the Module:** 1 semester[s]
	Repeat Exams Permitted: according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Master's Thesis
Language: German
Frequency: annually

Lehr-/Lernmethoden:
Independent project work

Literature:

Eid, M., & Diener, E. (Eds.). (2006). *Handbook of multimethod measurement in psychology.* American Psychological Association.

Field, A. (2018). Discovering statistics using IBM SPSS statistics. Sage.

Field, A. (2018). Discovering statistics using R. Sage.

Kline, P. (2015). A handbook of test construction – introduction to psychometric design. Routledge.

Leavy, P. (2004). The Oxford handbook of qualitative research. Oxford University Press.

Examination

PSY-5181 Master’s Thesis

Master's thesis / work period for assignment: 6 months, graded

Examination Prerequisites:

The students select a topic that originates in research on learning and instruction. They develop a (set of) research question(s), and independently run an empirical study.

Description:

The Master’s thesis has about 80 pages. It usually consists of a problem statement, a theory section, a description of the research questions and hypotheses, a methods section, a results section, a discussion section, and a section on limitations and conclusions.

Module PSY-5182: Master's Colloquium *Master's Colloquium*	3 ECTS/LP
Version 1.0.0 Person responsible for module: Prof. Dr. Ingo Kollar Dresel, Markus, Prof. Dr.	
Contents: The students present and discuss the current state of their Master's thesis. They also report on specific problems they experience during their project.	
Learning Outcomes / Competences: Students should learn how to derive challenging research questions from related research on learning and instruction, and how to develop a research plan that is adequate to answer these research questions. They also are supposed to learn how to critically evaluate their own research. They also develop their general academic skills further (academic writing, academic presenting, debating).	
Remarks: Together with the module PSY-5181 "Master's Colloquium", this module is a mandatory part of the module group "Master's Thesis". Students are recommended to take this module once they have completed the two specializations including the two research projects they have selected in the elective modules. Students should complete this module in the fourth semester. This module exclusively targets students from the Master's program Research on Learning and Instruction: An Interdisciplinary Program".	
Workload: Total: 90 h	

Conditions: Knowledge of theories, evidence, and empirical methods of research on learning and instruction		**Credit Requirements:** Passing module exam
Frequency: annually	**Recommended Semester:** from 4.	**Minimal Duration of the Module:** 1 semester[s]
Contact Hours: 2,00	**Repeat Exams Permitted:** according to the examination regulations of the study program	

Parts of the Module

Part of the Module: Master's Colloquium
Language: English / German
Frequency: annually

Lehr-/Lernmethoden:
Student presentations, teacher-led discussions, small group collaboration

Literature:

Eid, M., & Diener, E. (Eds.). (2006). *Handbook of multimethod measurement in psychology.* American Psychological Association.

Field, A. (2018). Discovering statistics using IBM SPSS statistics. Sage.

Field, A. (2018). Discovering statistics using R. Sage.

Kline, P. (2015). A handbook of test construction – introduction to psychometric design. Routledge.

Leavy, P. (2004). The Oxford handbook of qualitative research. Oxford University Press.

Assigned Courses:

Master´s Colloqium RLI // Mastercolloquium ILLF (colloquium)
**(in attendance) **

Examination

PSY-5182 Master's Colloquium

module exam, Master's Colloquium / length of examination: 45 minutes, not graded

Examination Prerequisites:

The students work on their Master's Thesis project and prepare an oral presentation of their project.

Description:

The oral presentations talks about the current status of the Master's thesis and about current problems regarding the theoretical background and/or the empirical methodology. These problems are discussed in the plenary.