

COURSE LIST Institute of Education Sciences

Please note that Erasmus students are allowed to take courses from lists of all faculties/schools according to their needs or interests.

Courses offered in Turkish

are listed at the website of the institute <http://ebe.comu.edu.tr/> or

you can contact [Departmental Coordinator](#) to get the necessary information

Courses offered in English & German

German Language Education

English Language Education

(Please note that Erasmus students are allowed to take courses from lists of all faculties/schools according to their needs or interests.)

Course Name	Course Name	ECTS Credits	Lecturer
Classroom Communication in Primary School	ULP – 19 – 009	6	Assoc. Prof. Dr. Çiğdem ŞAHİN TAŞKIN
Teaching and Learning Process in Primary Education	ULP – 19 - 011	6	Assoc. Prof. Dr. Çiğdem ŞAHİN TAŞKIN
Measurement Error in Research Design	ULP - 29 - 001	10	Assist. Prof. Dr. Sibel TELLİ
Introduction to statistic with R package program	ULP - 29 - 002	10	Assist. Prof. Dr. Sibel TELLİ
Alternative Evaluation Methods in Science Education	ULP-29-FM001	5	Assoc. Prof. Dr. Ajda KAHVECİ
Current Issues in Science Education	ULP-29-FM004	6	Assoc. Prof. Dr. Ajda KAHVECİ

Science Education			
Misconceptions in Chemistry Education	ULP-29-FM002	5	Assoc. Prof. Dr. Ajda KAHVECİ
Research Methods in Education	ULP-29-FM003	7	Assoc. Prof. Dr. Murat KAHVECİ
Action Research in Science Education	ULP-29-012	8	Assist. Prof. Dr. Sibel TELLİ

Course Code	ULP – 19 - 009
Name of the Course in English	Classroom Communication in Primary School
Name of the Course in Turkish	İlköğretimde Sınıf İçi İletişim
Language of the Course	İngilizce
Level of the Course	Master
Lecturer	Assoc. Prof. Dr. Çiğdem ŞAHİN TAŞKIN
ECTS Credit	6
COMU Credit	3
Description	This course aims to explore classroom interaction and communication, teacher-pupil pupil-pupil communication, influences of different teaching strategies into classroom communication and politics of ministry of education. It also gives information about how classroom communication influences pupils' identity development.

Course Code	ULP – 19 - 011
Name of the Course in English	Teaching and Learning Process in Primary Education

Name of the Course in Turkish	İlköğretimde Öğrenme Öğretme Süreci
Language of the Course	İngilizce
Level of the Course	Master
Lecturer	Assoc. Prof. Dr. Çiğdem ŞAHİN TAŞKIN
ECTS Credit	6
COMU Credit	3
Description	This course aims to explore the aims and importance of primary education, teaching and learning process and approaches used in this process. It also gives information about learning theories, planning learning activities in primary schools, pupils' success and teachers' quality.
Course Code	ULP-29-FM001
Name of the Course in English	Alternative Evaluation Methods in Science Education
Name of the Course in Turkish	Fen Eğitiminde Alternatif Değerlendirme Yöntemleri
Language of the Course	English
Level of the Course	Master
Lecturer	Assoc. Prof. Dr. Ajda Kahveci
ECTS Credit	5
COMU Credit	3
Description	This Master's level course is designed to include an analysis and synthesis of the ideas related with conceptual learning in science. Alternative assessment and evaluation methods that focus on conceptual understanding will be explored in theory and practice.

Course Code	ULP - 29 - 001
Name of the Course in English	Measurement Error in Research Design
Name of the Course in Turkish	Araştırma desenlerinde ölçme hataları
Language of the Course	English
Level of the Course	Doctorate
Lecturer	Assist. Prof. Dr. Sibel TELLI
ECTS Credit	10
COMU Credit	5
Description	<p>This course provides an in-depth analysis and discussion of the essence of measurement error and procedures to minimize it in research. First, brief overview of measurement principles will be given to the students. Second, the various causes of different types of measurement error will be shared. Last, example of measures and measurement will be given, such as cross cultural measurement. This course will help PhD students to carry out their own research and facilitate the understanding of the basic principles for the measures design, methods and empirical research.</p>

Course Code	ULP - 29 - 002
Name of the Course in English	Introduction to statistic with R package program
Name of the Course in Turkish	R paket programi ile istatistiğe giriş
Language of the Course	English
Level of the Course	Doctorate
Lecturer	Assist. Prof. Dr. Sibel TELLI
ECTS Credit	10

COMU Credit	5
Description	<p>This course provides a practical introduction to the statistics environment R (r-project.org). For the social sciences, R offers a great variety of statistical methods, state-of-the-art graphics, and--if desired—the option to automate analyses, or even program one's own methods. In the course, students will get familiar with the characteristics of R and with using the software and its add-on packages for statistics and graphics. Exercises will comprise common statistical tasks (e.g., analysis of variance, multiple regression, exploratory factor analysis) as well as not so common, but helpful methods, and the production of illustrative graphics. This course should enable the students to perform statistical tasks and produce graphics using R on their own, and to know how to find help and additional information.</p> <p>Outline</p> <ol style="list-style-type: none"> (1) Structure of the R software; variables and data in R (2) Getting help in R (3) Simple statistical functions and tests (4) Basic graphics (5) Reading in data; saving data; simple recoding and computing tasks (6) The R Commander: A graphical user interface for R (7) Mean comparisons and analysis of variance (8) Literature recommendations

Course Code	ULP-29-FM004
Name of the Course in English	Current Issues in Science Education
Name of the Course in Turkish	Fen Eğitiminde Güncel Konular
Language of the Course	English

Level of the Course	Master
Lecturer	Assoc. Prof. Dr. Ajda Kahveci
ECTS Credit	6
COMU Credit	3
Description	In this course, current issues that are important in the field of science education will be explored. The course is designed as a survey course that spans the contemporary chemistry education literature and encourages the students to position themselves in an area of interest. By the end of the course, the students are expected to plan and develop a research agenda for their graduate work.

Course Code	ULP-29-FM002
Name of the Course in English	Misconceptions in Chemistry Education
Name of the Course in Turkish	Kimya Eğitiminde Kavram Yanılgıları
Language of the Course	English
Level of the Course	Master
Lecturer	Assoc. Prof. Dr. Ajda Kahveci
ECTS Credit	5
COMU Credit	3
Description	In this course student misconceptions in chemistry at all levels of schooling will be explored. The emphasis will be primarily on common misconceptions found in the chemistry education literature that deal with topics such as the structure of matter, chemical bonding, chemical reactions, acids, bases, neutralization, stoichiometry, thermodynamics and chemical equilibria.

Course Code	ULP-29-FM003
Name of the course in English	Research Methods in Education
Name of the course in Turkish	Eğitimde Araştırma Yöntemleri
Language of the course	English
Level of Course	() Bachelor's / Undergraduate (X) Master's () Doctorate
Lecturer	Assoc. Prof. Dr. Murat Kahveci
ECTS Credits	7
COMU Credits	5 (4+2)
Description	<p>Course Overview</p> <p>Research Methods in Education is a graduate level course offered to those whose need to conduct a thesis research in social and behavioral sciences. This course will cover various research methods and allow participants to develop basic research practices throughout the semester. Field trips will be necessary to actually design a small-scale research, including but not limited to writing-up research topic, research questions, choosing an appropriate research method, site visits, data collection and preparation for further analysis, data analysis and reaching conclusions. This class should help the participant develop a philosophy and approach to conducting research in education.</p> <p>Course Goals</p> <p>The focus of the course is to provide students with an opportunity for:</p> <p>familiarity with various empirical research methods,</p> <p>familiarity with research terminology,</p> <p>clarity and experience of data collection and analysis, and</p>

	ability to report research findings in a scientific manner.
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Course Code	ULP-29-012
Name of the course in English	Action Research in Science Education
Name of the course in Turkish	Fen Eğitiminde Aktif Araştırma
Language of the course	English
Level of Course	() Bachelor's / Undergraduate (X) Master's () Doctorate
Lecturer	Assist. Prof. Dr. Sibel TELLİ
ECTS Credits	8
COMU Credits	4
Description	This class provides the overview of action research by covering the international literature and introducing the examples to answer the question "What is action research ? " Students in this class will be familiar with theory and development of action research by a balanced coverage of qualitative, quantitative and mixed- methods approaches. Meanwhile, methodological concerns about the action research studies will be given. By that way, they will be able to capture, conceptualize, evaluate, interpret their experiences and have a deep look to at their practice and build a connection between theory and practice in their professional life. This will help them with the possible way of understanding of themselves as teacher and their students in their classrooms. The course will be completed with a mini-research project.

