

MB 204 - RESEARCH METHODS IN EDUCATION - Eğitim Fakültesi - Yabancı Diller Eğitimi Bölümü

General Info

Objectives of the Course

The aim of the course "Research Methods in Education" is to equip students with a systematic understanding of core concepts, ethical principles, and the research design process in educational research. Throughout the course, students develop competencies in identifying research problems, formulating research questions and/or hypotheses, selecting appropriate research designs (quantitative, qualitative, and mixed-methods), determining samples or study groups, developing or selecting data collection instruments, conducting data collection procedures, and performing basic data analyses (descriptive and inferential analyses; qualitative coding and theme/category development). The course also fosters the ability to address quality criteria (validity and reliability, and trustworthiness in qualitative research), critically evaluate research findings, and communicate results through academic reporting and scientific writing.

Course Contents

"Research Methods in Education" begins with the nature of scientific knowledge and the fundamentals of the scientific method, focusing on empirical and theoretical processes, the definition of research, and major classifications of research. The course introduces quantitative approaches such as survey, correlational, causal-comparative, experimental, single-subject, design and development research, and meta-analysis, as well as qualitative approaches including ethnography, historical research, action research, phenomenology, grounded theory, case study, and narrative inquiry. It then addresses problem definition in research by covering the research problem, literature review, variables and their classifications, hypotheses, purpose, significance, assumptions, limitations, and operational definitions. The sampling unit examines population-sample relations, probability and non-probability sampling methods, and determining sample size (estimation for continuous and discrete variables). The quantitative research component discusses threats to internal and external validity; conducting survey and correlational studies; causal-comparative and experimental designs (pre-experimental, true experimental, and quasi-experimental); single-subject designs; time-series and factorial designs; and key principles to consider when implementing quantitative studies. It also covers the stages of design and development research and meta-analysis. The qualitative research component focuses on foundations of qualitative research, differences between qualitative and quantitative approaches, qualitative research stages, and content analysis. The course concludes with academic reporting and writing, including the structure of a research report (introduction, method, results/findings, discussion, references, appendices), general writing rules, formatting of tables and figures, quoting practices, in-text citation, and preparing the reference list.

Recommended or Required Reading

Eğitimde Bilimsel Araştırma Yöntemleri, Şener Büyüköztürk, Ebru Kılıç Çakmak, Özcan Erkan Akgün, Şirin Karadeniz, Funda Demirel

Planned Learning Activities and Teaching Methods

Lecture, Discussion Method, Question-answer

Recommended Optional Programme Components

Bilimsel Araştırma Yöntemi, Niyazi Karasar

Instructor's Assistants

The course is taught by a single instructor.

Presentation Of Course

The course is delivered face-to-face in a classroom setting.

Dersi Veren Öğretim Elemanları

Assoc. Prof. Dr. Bilal Üstün

Program Outcomes

1. can explain the basic concepts related to research methods.
2. can explain data collection techniques.
3. can explain the stages of a scientific research.
4. can explain quantitative and qualitative research designs.

| Order | PreparationInfo | Laboratory | TeachingMethods | Theoretical | Practise |
|-------|--|------------|---------------------------------|--|----------|
| 1 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Introduction and orientation; course aims and scope; resources and procedures; academic integrity; assessment framework (midterm/final, assignment–participation criteria) and expectations. | |
| 2 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Ways of knowing; scientific method; empirical and theoretical processes; the definition of research and core concepts. | |
| 3 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | |
| 4 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Quantitative research types I: survey and correlational research (purpose, procedures, sample applications). | |
| 5 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Quantitative research types II: causal-comparative and experimental research; introduction to single-subject research; overview of design and development research and meta-analysis. | |
| 6 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Stages of the research process; ethical principles and violations; responsibilities in research. | |
| 7 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Defining the problem I: problem and research problem; literature review; structuring a research topic. | |
| 8 | | | | Midterm exam | |
| 9 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Defining the problem II: variables and classification; hypotheses; purpose and significance; assumptions, limitations; definitions (operational definitions). | |
| 10 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Sampling methods I: population and census; sample and sampling; probability sampling (simple random, stratified). | |
| 11 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Sampling methods II: non-probability sampling (systematic, purposive, convenience); sample size and estimation (continuous/discrete variables). | |
| 12 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Quantitative research I: threats to internal/external validity; conducting survey and correlational studies; key implementation issues. | |
| 13 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Quantitative research II: experimental designs (pre-, true-, quasi-experimental); time-series and factorial designs; single-subject designs (AB, ABA, etc.) and implementation principles. | |
| 14 | Students are advised to read the topics for the following week from the course book (by referring to the course contents on the course web page) and come to class prepared. | | Lecture and in-class discussion | Qualitative research and reporting: foundations and stages of qualitative research; qualitative vs. quantitative differences; content analysis; research report sections and academic writing rules (in-text citation, references, tables/figures formatting). | |
| 15 | | | | Final exam | |

Workload

| Activities | Number | PLEASE SELECT TWO DISTINCT LANGUAGES |
|-----------------------|---------------|---|
| Vize | 1 | 1,00 |
| Final | 1 | 1,00 |
| Ödev | 5 | 3,00 |
| Ara Sınav Hazırlık | 1 | 5,00 |
| Final Sınavı Hazırlık | 1 | 5,00 |
| Ev Ödevi | 5 | 3,00 |
| Tartışmalı Ders | 10 | 1,00 |
| Derse Katılım | 13 | 2,00 |

Assesments

| Activities | Weight (%) |
|-------------------|-------------------|
| Ara Sınav | 40,00 |
| Final | 60,00 |

| | P.O. 1 | P.O. 2 | P.O. 3 | P.O. 4 | P.O. 5 | P.O. 6 | P.O. 7 | P.O. 8 | P.O. 9 | P.O. 10 | P.O. 11 | P.O. 12 | P.O. 13 | P.O. 14 | P.O. 15 | P.O. 16 | P.O. 17 | P.O. 18 | P.O. 19 | P.O. 20 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| L.O. 1 | | | | | | | | 5 | | | 5 | | | | | 5 | 5 | | | 5 |
| L.O. 2 | | | | | | | | 5 | | | 5 | | | | | 5 | 5 | | | 5 |
| L.O. 3 | | | | | | | | 5 | | | 5 | | | | | 5 | 5 | | | 5 |
| L.O. 4 | | | | | | | | 5 | | | 5 | | | | | 5 | 5 | | | 5 |

Table :

- P.O. 1 :** Ölçmenin ve bilimsel araştırmanın kavramlarını tanımlar ve bunu okul ortamında uygular ve farklı ölçme ve değerlendirme yöntem ve teknikleri kullanarak öğrencilerin gelişimini izler.
- P.O. 2 :** Günlük ders planlarını öğretim planlarına göre düzenler ve uygun öğretim teknolojisi ve materyalleri hazırlar, uyarlar ve değerlendirir.
- P.O. 3 :** Bireyin gelişim, öğrenme ve rehberlik süreçlerini ve bu süreçlerin öğrenci gelişimi ile ilişkisini analiz eder.
- P.O. 4 :** Teorik ve uygulamalı dilbilim kavramlarını ve ilkelerini ve birinci ve ikinci dil edinimi teorilerini açıklar, bu teorilerin yabancı dil öğretimi teorileri ve uygulamalarıyla bağlantısını kurar.
- P.O. 5 :** Temel edebiyat kavramlarını ve ilkelerini açıklar, bu kavram ve ilkeleri yabancı dil öğretimi alanında uygular.
- P.O. 6 :** Türkçe ve Almanca temel dil becerilerini ve dil bilgisi kurallarını etkili bir şekilde kullanır ve hedef kitleye uygun öğretim planı seçerek uygulamalarda bulunur.
- P.O. 7 :** Yabancı dil öğretim yaklaşım ve yöntemlerini tanımlar ve uygular.
- P.O. 8 :** Alanındaki yayınların işlevselliğini, güncelliğini, etkinliğini değerlendirir ve özgün makaleler yazar.
- P.O. 9 :** Almancadan Türkçeye veya Türkçeden Almancaya farklı alanlarda çeviri yapar.
- P.O. 10 :** Alanının gerektirdiği düzeyde bir bilgisayar yazılımı ile birlikte bilişim ve iletişim teknolojilerini sınıf içinde uygular.
- P.O. 11 :** İhtiyaçları doğrultusunda yaşam boyu öğrenme yeteneği kazanır.
- P.O. 12 :** Türk Devrimi'nin ortaya çıkmasına yol açan siyasal, ekonomik, toplumsal, düşünsel koşulları yorumlar, birlikte yaşadığı toplum ile bütünlük içinde Atatürk ilke ve devrimleri doğrultusunda ulusal amaç ve ülküler ile yurt sevgisi başta olmak üzere yüksek insani değerleri benimser.
- P.O. 13 :** Yabancı dili Avrupa Dil Portföyü B1 Genel Düzeyinde kullanarak bu dilde iletişim kurar.
- P.O. 14 :** Sanatsal ve kültürel konulara ilişkin bireysel yeteneklerini geliştirir, genel kültür formasyonu kazanır, etkin katılım sağlar.
- P.O. 15 :** Alman kültürünü tanıır, kültür karşılaştırmaları yapar ve kültürlerarası iletişimde bulunabilme yetisini kazanır.
- P.O. 16 :** Bireysel ve grup çalışmalarında aldığı sorumlulukları etkin bir şekilde yerine getirir ve akranlarının uygulamalarını değerlendirir.
- P.O. 17 :** Toplumsal sorumluluk bilinciyle yaşadığı sosyal çevre için mesleki proje ve etkinliklerin planlama ve yürütme sorumluluğunu alır ve proje ekibinin gelişimini takip eder.
- P.O. 18 :** Alanında karşılaştığı sorunlara ilişkin çözüm önerilerini yazılı ve sözlü olarak aktarır.
- P.O. 19 :** Edindiği bilgi ve becerileri eleştirel bir yaklaşımla değerlendirir, öğretmenlik mesleğine uygun tutum ve davranış kazanır ve sergiler.
- P.O. 20 :** Almanca öğretim alanında uygulamalarda bulunur.
- L.O. 1 :** Araştırma yöntemleri ile ilgili temel kavramları açıklayabilir.
- L.O. 2 :** Veri toplama tekniklerini açıklayabilir.
- L.O. 3 :** Bilimsel bir araştırmanın aşamalarını açıklayabilir.
- L.O. 4 :** Nicel ve nitel araştırma desenlerini açıklayabilir.