



FACULTY OF EDUCATION
ED 302 RESEARCH METHODS IN EDUCATION

☁️ SPRING, 2024-2025 ☀️

Course Information

Schedule & Classroom: ED 302_SC01 Monday 9:00-11:00, D234
Wednesday 13:00-15:00, D234
ED 302_SC02 Monday 11:00-13:00, D234
Wednesday 11:00-13:00, D234
ED 302_SC03 Tuesday 11:00-13:00, D234
Wednesday 9:00-11:00, D234

Instructor Information

Instructor: Assoc. Prof. Dr. Münevver İLGÜN DİBEK
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Office hours: Tuesday 09.00-11.00 by appointment (*please put ED 302 in the subject of ALL email correspondence*)

Course Description

(2+2+0) 3 TEDU Credits, 5 ECTS Credits

The aim of this course is to provide details regarding how to conduct research in education. In this regard, the course aims to offer information on such issues as the differences between research methodologies and how to deal with data collection –analysis procedures. etc.

Extended Course Descriptions

The nature of research, the process of conducting research, research methodologies, research by practitioners, the research problem, variables and hypotheses, locating and reviewing the literature, sampling, instrumentation, break, ethics and research, validity and reliability, internal validity, descriptive statistics, inferential statistics, statistics in perspective, working on researchable question and proposed research designs.

Learning Outcomes

Upon successful completion of this course, students will be able to:

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1. Define basic concepts and principles used in education research.
2. Explain the differences of various research methods.
3. Summarize the steps followed in education research process.
4. Exemplify writing research questions, selection of an appropriate sampling, literature review, data collection and data analysis processes.
5. Exemplify action researches.
6. Indicate differences between qualitative and quantitative research patterns.

Course Materials

Recommended textbooks:

- Fraenkel, J. R., Wallen, N. E. & Hyun, H. (2011). *How to design and evaluate research in education*. Boston, MA: McGraw-Hill
- Creswell, J. W. (2014). *Research design* (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Best, J. W., & Kahn, J. V. (2006). *Research in education* (10th ed.). Boston, MA: Pearson Education, Inc.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. New York, NY: Routledge.
- Matthews, B., & Ross, L. (2010). *Research methods: A practical guide for the social sciences*. Essex, England: Pearson Education Limited.
- Neuman, W. L. (2009). *Understanding research*. Boston, MA: Pearson Education, Inc.
- Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches* (7th ed.). London: Pearson Education Limited.

Recommended online sources:

APA 7th Style: https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html

TEDU Library: <http://catalog.tedu.edu.tr/client/defaulttr>

Student Workload (Total 92 hours)

Course readings (14 hours), Hands-on Work (13 hours), Resource Review (5 hours), Report on a topic (10 hours), Oral presentation (10 Hours)

Learning Activities

Explaining, Discussion, Questioning, Reading, Demonstrating, Problem Solving, Collaborating, Web searching, Peer Teaching, Hands-on Activities, Inquiry, Brainstorming

Assignments

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Within the scope of the course, the evaluation will be done through assignments, midterm and final exam. The percentages are as follows:

Course Requirements	Weight
Participation	10 %
MIDTERM	30 %
Assignment 1: Report on a topic (Literature review)	20 %
FINAL	40 %
TOTAL	100 %

Percentage Scores	Grade Points	Letter Grades
100-90	4.00	AA
89-85	3.50	BA
84-80	3.00	BB
79-75	2.50	CB
74-70	2.00	CC
69-60	1.50	DC
59-50	1.00	DD
49-0	0.00	F
Absent & Unsuccessful	0.00	FX

❖ **Participation (10%):** You are required to scan and compile all class activities into a **single PDF file**. Please ensure that:

1. **Activity Order:** The activities must be uploaded in the order they were conducted in class.
2. **Complete Pages:** All pages related to each activity should be included. Do not omit any pages.
3. **Fully Completed Activities:** Ensure that **all activities are fully completed and filled in** before submission. Incomplete activities will not be accepted.
4. **Scanning Requirements:** If you take photos instead of scanning, make sure that only the activity itself is visible—**avoid capturing any background**.

Failure to comply with these guidelines may result in a lower score for this assignment. The due date for the submission of this assignment will be announced to you.

❖ **Midterm & Final Exam (30% & 40%):** One in-class midterm and final exam will be given in class in response to questions that come directly from class experiences, and course readings. These exams will likely to include open-ended, multiple choice, short answer and matching questions.

❖ **Assignment 1: Literature Review (20%):**

A literature review is a structured and critical synthesis of existing research on a specific topic. This assignment requires you to conduct a **small-scale literature review** on an **educational topic of your choice** and synthesize findings from at least **10 scholarly sources** (peer-reviewed journal articles, books, or book chapters from edited volumes).

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You will submit the **final version of your literature review** as a soft copy on Moodle. **A rubric for this assignment will be provided during class.** The due date for submission is **April 6, 2025.**

Assignment Requirements

- **Sources:** You must use a minimum of **10 primary sources** (peer-reviewed journal articles, books, or book chapters).
- **Formatting:**
 - **Length:** Maximum **3 pages**, excluding references.
 - **Font:** Times New Roman, **12 pt size**.
 - **Line spacing:** **1.5 lines**.
 - **Alignment:** **Justified** (aligned to both left and right margins).
 - **Referencing style:** **APA 7th edition** (both in-text citations and reference list).
- **Submission:** Upload the final version on **Moodle** by the due date.

Steps to Complete Your Literature Review

1. **Choose a Topic:** Select an **educational** topic that interests you. Your topic should be specific enough to allow for a focused review.
2. **Conduct a Literature Search:** Use academic databases (Google Scholar, ERIC, Scopus, Web of Science, etc.) to locate **peer-reviewed journal articles, books, or book chapters** on your topic. **Do NOT use Wikipedia, blogs, or news articles.**
3. **Select and Analyze Sources:** Choose at least **10 relevant and high-quality** sources. Read them critically and take notes.
4. **Organize Your Literature:** Group the articles based on **key themes or findings** rather than summarizing them one by one. You should compare, contrast, and synthesize the results of these studies.
5. **Develop an Inquiry Question or Hypothesis:** Your literature review should be centered around a guiding research question or hypothesis that frames your discussion.
6. **Write the Literature Review:** Follow the structured format below.

Structure of the Literature Review

1. Introduction (1 paragraph)

- Define the topic and provide relevant background information.

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- Explain the significance of the topic and why it is important to review the literature on this subject.
- Clearly **state your research question or hypothesis**.

2. Thematic Literature Review (Main Body)

- **Synthesize (do not summarize)** the findings of the articles.
- Organize your discussion around **key themes**, not individual studies. Identify common findings, contradictions, gaps, and emerging trends.
- Compare and contrast the studies—how are they similar? How do they differ? What are their limitations?
- Use **clear transitions** to connect different themes and ensure coherence in your discussion.

3. Conclusion

- Summarize the key findings from your literature review.
- Explain how these findings **address your research question/hypothesis**.
- Identify **gaps in the literature** and suggest potential directions for future research.

4. References (Separate Page)

- List all sources cited in your review using **APA 7th style**.
- Ensure that in-text citations match the reference list.

Key Writing Guidelines

- **Avoid simple summaries** of each source. Instead, analyze, compare, and synthesize findings.
- **Use academic language** and avoid informal expressions.
- **Paraphrase instead of direct quotations** whenever possible.
- **Ensure coherence and logical flow** between paragraphs and themes.
- **Check for APA 7th formatting** (in-text citations and reference list).
- **Proofread** before submission to avoid grammatical or structural issues.

Failure to follow these guidelines (e.g., using non-scholarly sources, exceeding page limits, not applying APA 7) may result in a lower grade.

Examples of Snapshots of Literature Review

Weak version (simple summary of studies, lacks synthesis): *"Smith (2020) found that student engagement increases with active learning strategies. Similarly, Johnson (2021) reported that students perform better when they participate in interactive activities. Brown (2019) also emphasized that engagement is key to academic success."*

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Good version (synthesized and comparative approach): *"Research consistently highlights the role of active learning in enhancing student engagement and performance. Smith (2020) and Johnson (2021) both found that interactive learning strategies significantly improve student outcomes, supporting Brown's (2019) argument that engagement is a crucial factor in academic success. However, while Smith (2020) focused on higher education, Johnson (2021) explored primary school settings, suggesting that the impact of engagement may vary across educational levels."*

COURSE POLICIES

I. Plagiarism

a. Plagiarism is a form of dishonesty that occurs when a person passes off someone else's work as his or her own. This can range from failing to cite an author for ideas incorporated into a student's paper to cutting and pasting paragraphs from different websites to handing in a paper downloaded from the internet. All are plagiarism.

b. *All parties to plagiarism are considered equally guilty.* If you share your coursework with another student and she plagiarizes it, you are considered as guilty as the one who has plagiarized your work, since you enabled the plagiarism to take place. *Under no circumstances should a student make his/her coursework available to another student unless the instructor gives explicit permission for this to happen.* Copying someone's work is an extreme and straightforward act of plagiarism. More commonly, however, students plagiarize without realizing they are doing so. This generally happens when a student fails to acknowledge the source of an idea or phrasing. *Avoid plagiarism by citing sources properly!*

II. Cheating

You may neither receive help from nor give help to others during an in-class exam. During exams, you may not leave the room, talk, or use dictionaries, translators, cell phones or programmable calculators. And please keep your eyes on your own work.

If you are caught cheating in an exam, this is a "disiplin suçu" and I strictly follow YÖK procedures:

http://www.yok.gov.tr/web/guest/icerik/-/jo_content/56_INSTANCE_rEHF8BIsfYRx/10279/17960

III. Attendance

This course requires your regular participation, attendance, and punctuality. It is expected that you attend the class on a regular basis and be on time. It is your responsibility to keep in touch with me about the emergencies prior to class. *Exceeding 20% of attendance (12 hours) will result a half letter grade reduction: an AA becomes BA or a CC becomes a DC.* The TEDU policy concerning attendance will be followed strictly.

IV. Late Work

You are supposed to turn in each assignment on time. I will only accept late assignments in unusual circumstances (e.g. documented illness). In all other cases, I will reduce %10 of the total point per day for late work, and the assignment will not be accepted after three days late.

V. Late Assignment Submission Policy

Each assignment is to be turned in on time. Arrangements for accepting late assignments will be made only in unusual circumstances (e.g., major illness, death of loved one), and only if you are able to provide documentation to support your excuse. *In all other cases, there will be a 10% point-reduction per day for late work, and work will not be accepted if it is three or more days late.*

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VI. Extra Credit

There is no rewriting or extra credit offered in this course.

VII. Class Participation

Class participation is an integral part of this course. Classes may involve interactive lectures, small group discussions and activities, concept mapping, case studies, audiovisuals, video presentations, class presentations, field trips, observations, handouts, written assignments, exams, library/web research projects and journals.

VIII. Class Readings

Please read the assigned readings prior to class so that you may participate fully in the discussion. All readings may not necessarily be discussed directly in class, but it is assumed that you will have read the materials so that it may serve as a jumping off point for discussion.

IX. Announcements

All announcements will be made on the Moodle site for this course or using e-mail. It is your responsibility to keep your e-mail address operative all times. Check your e-mails regularly in order to stay informed.

Tentative Course Schedule

Date	Topic/Assessment	Readings
Week 1 10 -16 February	First meeting and overview of the course	Syllabus and Textbooks
Week 2 17 -23 February	Main components of the research methods course	Ch 1: The Nature of Educational Research (Creswell, 2012) Ch 2 : The Research Problem (Fraenkel et al., 2012) Activity about research problem
Week 3 24 February - 02 March	Main components of the research methods course (continued) & the role of ethics on research	Ch 5 : Variables and Hypothesis (Fraenkel, Wallen & Hyun, 2012) Ch 2, Ch 4 (Creswell, 2012) Activity about variables and hypothesis
Week 4 03 - 09 March	Conducting the literature review using several sources	Ch 4: Ethics and Research (Fraenkel et al., 2012) Activity about evaluating the proposals regarding ethical rules & Role play about ethics

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Week 5 10 - 16 March	Conducting the literature review using several sources & Giving appropriate citation	Ch 3: Locating and Reviewing the Literature (Fraenkel et al., 2012); Ch 3, Ch 9 (Creswell, 2012) APA 7 th style Activity about Literature Review Activity about APA
Week 6 17 - 23 March	The methods of selecting samples from population	Ch 6: Sampling (Fraenkel et al., 2012) Activity about sampling
Week 7 24 - 30 March	The types of data collection tools	Ch 7: Instrumentation (Fraenkel et al., 2012) Activity about instrumentation
Week 8 31 March - 06 April	FEAST OF RAMADAN	FEAST OF RAMADAN
Week 9 7 - 13 April	MIDTERM	
Week 10 14 - 20 April	The validity and reliability of the scores obtained from data collection instruments Submission 1: Literature Review (Due date 6TH April, hour:23:55)	Ch 8: Validity and Reliability (Fraenkel et al., 2012) Activity about validity
Week 11 21 - 27 April	NO CLASS	
Week 12 28 April - 4 May	The validity and reliability of the scores obtained from data collection instruments (Continued)	Ch 8: Validity and Reliability (Fraenkel et al., 2012) Activity about reliability

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Week 13 05 - 11 May	The types of research design	Ch 13: Experimental Research (Fraenkel et al., 2012) Activity about experimental design
Week 14 12 -18 May	The types of research design	Ch 15: Correlational Research Ch 17: Survey Research (Fraenkel et al., 2012) Activity about survey design
Week 15 19 - 25 May	The types of research design	Ch 19: Observation and Interviewing (Fraenkel et al., 2012) Ch 20: Content Analysis (Fraenkel et al., 2012)
Week 16 26 - 30 May	The types of research design	Ch 24: Action Research (Fraenkel et al., 2012)

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