

İndirilme Tarihi

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DST225 - SCIENTIFIC RESEARCH METHODS - Kozaklı Meslek Yüksekokulu - Veri Tabanı, Ağ Tasarımı ve Yönetimi Bölümü

General Info

Objectives of the Course

The aim of this course is to enable students to comprehend the scientific research process, identify research problems, select appropriate methods and techniques and present research findings in accordance with scientific writing principles. The course also aims to develop students' skills in critical thinking, problem solving, and adherence to scientific ethical principles.

Course Contents

The concepts of science and research, stages of the scientific research process, identification of research problems, literature review, research types (quantitative, qualitative, and mixed methods), population and sampling, data collection tools and techniques, research report writing, reference management, and research ethics.

Recommended or Required Reading

Büyükoztürk, Ş. (2018). Bilimsel Araştırma Yöntemleri. Pegem Akademi, Ankara

Planned Learning Activities and Teaching Methods

Lecture, question and answer, discussion

Recommended Optional Programme Components

none.

Instructor's Assistants

Dersi Veren Öğretim Elemanı Yardımcıları bulunmamaktadır. There are no teaching assistants for this course.

Presentation Of Course

face to face

Dersi Veren Öğretim Elemanları

Inst. Dr. Merve Nurlu

Program Outcomes

1. Explains the fundamental concepts and characteristics of scientific research.
2. Defines the stages of the scientific research process and develops a research plan.
3. Conducts a literature review, analyzes sources, and uses them in a scientific manner.
4. Defines and applies quantitative research designs (survey, experimental, correlational, etc.).
5. Defines and applies qualitative research designs (interview, observation, document analysis, etc.).
6. Prepares the research report in accordance with scientific writing rules.
7. Explains the concepts of population and sample, and determines the appropriate sampling method.
8. Applies citation rules and prepares references in the correct format.
9. Plans the data collection process and acts in accordance with research ethics principles.

Weekly Contents

Order	PreparationInfo	Laboratory TeachingMethods	Theoretical	Practise
1	Textbook Part I, pages 1-12	Lecture, Q&A	Foundations of Scientific Research	
2	Textbook Part I	Lecture, Discussion,Case Study,	Scientific Research Process	
3	Textbook Part II, pages 45-76	Lecture, Discussion, Case Study	Research Problem and Topic Selection	
4	Textbook Part II	Hands-on Practice, Demonstration	Literature Review and Use of Sources	
5	Textbook Part I	Lecture, Comparative Discussion	Types of Research	
6	Textbook Part V	Case Study, Practical Exercise	Quantitative Research Methods	
7	Textbook Part V	Case Study, Practical Exercise	Quantitative Research Methods	
8	Textbook Part VI	Case Study, Practical Exercise	Qualitative Research Methods	
9	Textbook Part VI	Case Study, Practical Exercise	Qualitative Research Methods	
10	Textbook Part III	Lecture, Q&A, Case Study	Population, Sampling, and Data Collection Methods	
11	Textbook Part III	Lecture, Q&A, Case Study	Population, Sampling, and Data Collection Methods	
12	Textbook Part VII	Discussion, Case Analysis	Data Collection Process and Ethical Principles	
13	Textbook Part II	Practical Exercise, Demonstration	References and Citation Writing	
14	Textbook Part II	Writing the Research Report	Writing the Research Report	
15			Final exam	

Workload

Activities	Number	PLEASE SELECT TWO DISTINCT LANGUAGES
Ödev	1	7,00
Final	1	14,00
Derse Katılım	14	2,00
Ara Sınav Hazırlık	7	2,00
Final Sınavı Hazırlık	14	1,00

Assesments

Activities	Weight (%)
Final	60,00
Vize	40,00

	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
L.O. 1	1									
L.O. 2										
L.O. 3										
L.O. 4										
L.O. 5										
L.O. 6										
L.O. 7										
L.O. 8										
L.O. 9										

Table :

- P.O. 1 :** Use and manage health informatics systems effectively.
- P.O. 2 :** Process medical data in accordance with confidentiality and ethical rules.
- P.O. 3 :** Install, maintain, and monitor digital systems used in healthcare institutions.
- P.O. 4 :** Apply information security protocols to ensure patient data protection.
- P.O. 5 :** Work effectively as part of a team in health technology environments.
- P.O. 6 :** Follow innovations and current technologies in the field and adopt lifelong learning.
- P.O. 7 :** Communicate effectively with healthcare staff and technical teams.
- P.O. 8 :** Possess basic medical knowledge and terminology and use medical terms correctly.
- P.O. 9 :** Recognize and effectively use software and hardware supporting healthcare services.
- P.O. 10 :** Act in accordance with professional ethics and quality standards.
- L.O. 1 :** Explains the fundamental concepts and characteristics of scientific research.
- L.O. 2 :** Defines the stages of the scientific research process and develops a research plan.
- L.O. 3 :** Conducts a literature review, analyzes sources, and uses them in a scientific manner.
- L.O. 4 :** Defines and applies quantitative research designs (survey, experimental, correlational, etc.).
- L.O. 5 :** Defines and applies qualitative research designs (interview, observation, document analysis, etc.).
- L.O. 6 :** Prepares the research report in accordance with scientific writing rules.
- L.O. 7 :** Explains the concepts of population and sample, and determines the appropriate sampling method.
- L.O. 8 :** Applies citation rules and prepares references in the correct format.
- L.O. 9 :** Plans the data collection process and acts in accordance with research ethics principles.