### Objectives of the Course

This course aims to enhance graduate students' skills in scientific research, critical thinking, and academic presentation. Students will explore current topics related to their field, conduct literature reviews, analyze research findings, and learn how to present their work effectively in academic settings. In addition, the course raises awareness of research ethics, scientific writing, and the culture of academic discussion.

#### Course Contents

The course covers topic selection, literature review, research methods, academic presentation skills, scientific writing, research ethics, as well as seminar presentations and discussion activities. Students learn how to conduct a comprehensive literature review by selecting current issues in their field, and they develop data collection and analysis skills through the application of research methods. They also gain experience in presenting research findings effectively by applying academic presentation techniques. Furthermore, the course raises awareness of scientific writing conventions and research ethics, while seminar presentations and discussion activities reinforce critical thinking and academic communication skills.

## Recommended or Required Reading

Booth, A., Sutton, A., & Papaioannou, D. (2016). Systematic Approaches to a Successful Literature Review. SAGE Publications; Silvia, P. J. (2018). How to Write a Lot: A Practical Guide to Productive Academic Writing. American Psychological Association; Resnik, D. B. (2020). The Ethics of Research with Human Subjects: Protecting People, Advancing Science, Promoting Trust. Springer; Students are encouraged to select articles published in journals within the last 5–10 years that are related to their field of study.

Planned Learning Activities and Teaching Methods

Literature review, practices on article and thesis writing, preparation of presentations

Presentation Of Course

Face to face

Dersi Veren Öğretim Elemanları

Prof. Dr. Aslıhan Uzun Dr. Öğr. Üyesi Bahar Tuba Fındık

## **Program Outcomes**

- 1. conduct a comprehensive literature review and critically analyze research in their field.
- 2. apply appropriate research methods to collect and analyze data
- 3. prepare and deliver effective academic presentations.
- 4. understand research ethics and scientific writing standards.
- 5. participate in scientific discussions and provide constructive feedback to their peers.

# Weekly Contents

Order	PreparationInfo	Laboratory	TeachingMethods	Theoretical	Practise
1	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Science and Scientific Research: Basic Concepts of Scientific Research	
2	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Identifying the research problem and hypotheses	
3	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Conducting a literature review in scientific research	
4	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Reliable academic databases (science direct, pubmed, scopus, tr dizin)	
5	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Points to consider in the use of sources when writing a text	
6	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Installation and use of mendeley	

Order	PreparationInfo	Laboratory	TeachingMethods	Theoretical	Practise
7	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Ethics and ethical theories	
8	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Ara sınav	
9	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Unethical behaviors and ethical violations in the research process	
10	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Preparation and presentation of the research project	
11	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Preparation and presentation of the research project	
12	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Seminar preparation techniques	
13	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Seminar preparation techniques	
14	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Presentations	
15	Each week, students will review the assigned reading materials in advance, prepare a short presentation, and actively participate in class discussions.		Seminars are conducted based on students' presentations of topics, active participation through discussions, and feedback.	Presentations	

# Workload

Activities	Number	PLEASE SELECT TWO DISTINCT LANGUAGES
Ödev	14	6,00
Derse Katılım	14	2,00
Ders Öncesi Bireysel Çalışma	14	10,00
Seminer	1	2,00
Alan Çalışması	14	8,00
Ders Sonrası Bireysel Çalışma	14	6,00
Rapor	14	6,00

	P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7
L.O. 1							
L.O. 2							
L.O. 3							
L.O. 4							
L.O. 5							

## Table:

P.O. 1: Bu bölümü başarı ile tamamlayan yüksek lisans öğrencileri: Uzmanlaştığı alanda ileri düzeyde bilgi ve beceriye sahip olur.

- **P.O. 2:** Yeterli düzeyde pratik ve teorik çalışmaları yapar.
- P.O. 3: Elde ettiği bilimsel sonuçları değerlendirip sunar.
- **P.O. 4:** Tezini alanında uzman kişiler tarafından oluşmuş jüri karşısında savunur.
- P.O. 5: Uzmanlaştığı alanda yeni bilimsel çalışmaları takip eder.
- P.O. 6: Bir yabancı dili Avrupa Dil Portföyü B2 Genel Düzeyinde kullanarak sözlü ve yazılı iletişim kurar.
- P.O. 7: Kimya alanın gerektirdiği düzeyde bilgisayar yazılımı ile birlikte bilişim ve iletişim teknolojilerini ileri düzeyde kullanır.
- L.O. 1: Kapsamlı bir literatür taraması yapar ve kendi alanlarındaki araştırmaları eleştirel bir şekilde analiz eder
- L.O. 2: Verileri toplar ve analiz etmek için uygun araştırma yöntemlerini uygular.
- **L.O. 3:** Etkili akademik sunumlar hazırlar ve sunar.
- **L.O. 4:** Araştırma etiği ve bilimsel yazım standartlarını anlar.
- **L.O. 5:** Bilimsel tartışmalara katılır ve akranlarına yapıcı geri bildirimde bulunur.