



<b>Course Code &amp; Name</b>	ES 176 RESEARCH AND TECHNICAL WRITING
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<b>Course Schedule</b>	
<b>Room</b>	
<b>Instructor's Name</b> <b>Phone</b> <b>E-mail</b> <b>Office Hours</b>	Dr. Gülten POLAT 0216-578 00 00 gulten.polat@yeditepe.edu.tr
<b>Assistant's Name</b> <b>Phone</b> <b>E-mail</b>	
<b>Midterm Dates</b>	
<b>Additional Information</b>	<p><i>Grading out of 100 is as follows:</i></p> <p>Midterm: 15%</p> <p>Homeworks: 18%</p> <p>Term Project: 27%</p> <p>Final Exam 40%</p> <p><i>Attendance:</i> 80% attendance is required by the university regulations (20% non-attendance only for sick-leave or similar; to be proven)</p>



COURSE INFORMATION				
<b>Course Code</b>	<b>ES 176</b>	<b>Course Title</b>	RESEARCH AND TECHNICAL WRITING	
<i>Semester</i>	<i>Credits</i>	<i>ECTS</i>	<i>C + P + L Hour</i>	Prerequisites
1	3	5	3+0+0	---

Language of Instruction	Course Level	Course Type
English	Bachelor's Degree (First Cycle Programmes)	Elective
<b>Course Coordinator</b>	Assist. Prof. Dr. Gülten POLAT	
<b>Instructors</b>	Assist. Prof. Dr. Gülten POLAT	
<b>Assistants</b>		
<b>Goals</b>	This course is designed with the aim of giving information to the students on the fundamentals of scientific research writing, methods of literature review methods, and thesis preparation techniques.	
<b>Content</b>	Basic research concerns prior to writing a research paper. The basis for scientific research; Research paper. Language for research writing. Concepts of research writing and a research paper. How to start? Structure of a paper: title, authors; abstract; introduction; materials and methods; data preparation and results; discussion and evaluation; concluding remarks, references, acknowledgments. Preparing tables and graphs. Proper use and misuse of language. Style in writing. Ethical aspects of research writing. Oral and poster presentation of a paper.	
<b>Contribution of the Course to the Professional Education</b>	Skills development of engineers for preparation to future professional needs on technical report writing and communication of engineering projects.	



Course Learning Outcomes	Detailed Program Outcomes	Teaching Methods	Assessment Methods
1) Adequate knowledge about literature review methods and selection of proper and correct materials	4b, 8a, 8b	1, 2	A, B
2) Adequate knowledge about evaluating the quality of published scientific papers	4b	1, 2	A, B
3) Ability to write a scientific report and/or thesis	7b, 7c, 7d, 9a, 6c	1, 2, 6	A, B, E, F
4) Ability to make an oral presentation of a scientific research	7b, 7c, 7d	1, 2, 8	A, B, E, F

<b>Teaching Methods:</b>	1: Lecture by instructor, 2: Lecture by instructor with class discussion, 3: Problem solving by instructor, 4: Use of simulations, 5: Problem solving assignment, 6: Reading assignment, 7: Laboratory work, 8: Term research paper, 9: Presentation by guest speaker, 10: Sample Project Review, 11: Interdisciplinary group working, 12: ...
<b>Assessment Methods:</b>	A: Written exam, B: Multiple-choice exam C: Take-home quiz, D: Experiment report, E: Homework, F: Project, G: Presentation by student, H: ...

### COURSE CONTENT

Week	Topics	Study Materials
1	General issues about research writing	Lecture Notes and Textbook
2	Terminology	Lecture Notes and Textbook
3	Scientific paper concepts	Lecture Notes and Textbook
4	Anatomy of a scientific paper: Title, authors, abstract, and introduction	Lecture Notes and Textbook
5	Anatomy of a scientific paper: Materials and methods; results and discussion	Lecture Notes and Textbook
6	Preparation of table and figures	Lecture Notes and Textbook
7	Anatomy of a scientific paper: Concluding remarks, references, acknowledgments	Lecture Notes and Textbook
8	Citations and ethics in research writing	Lecture Notes and Textbook
9	Midterm	Lecture Notes and Textbook



10	Thesis writing	Lecture Notes and Textbook
11	Evaluation of a published scientific paper and a published thesis	Lecture Notes and Textbook
12	Oral and poster presentation methods of a scientific study	Lecture Notes and Textbook
13	Teamwork: Oral presentation of a scientific study	Lecture Notes and Textbook
14	Teamwork: Oral presentation of a scientific study	Lecture Notes and Textbook

#### RECOMMENDED SOURCES

<b>Textbook</b>	All the handouts and slides are given to the students electronically.
<b>Additional Resources</b>	How to Write and Publish a Scientific Paper, R.A.Day, Oryx Press, NY, 1994. Bilimsel Bir Makale Nasıl Yazılır?, R.A.Day, Çeviri: Gülay Aşkar Altay, TÜBİTAK, 1996.

#### MATERIAL SHARING

<b>Documents</b>	All the handouts and slides are weekly given to the students electronically.
<b>Assignments</b>	Homeworks are submitted at the beginning of the next week and grades are announced before the final exam.
<b>Exams</b>	Midterm and final exam answers are shared when the students require to see their performance.

#### ASSESSMENT

IN-TERM STUDIES	NUMBER	PERCENTAGE
Mid-terms	1	25
Assignment	2	30
Term Project	1	45
<b>Total</b>		<b>100</b>
<b>CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE</b>		40
<b>CONTRIBUTION OF IN-TERM STUDIES TO OVERALL GRADE</b>		60
<b>Total</b>		<b>100</b>

<b>COURSE CATEGORY</b>	Field Course
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<b>COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES</b>		
No	Program Learning Outcomes	check √
<b>4b</b>	Ability to employ information technologies effectively.	√
<b>6c</b>	Ability to work individually.	√
<b>7b</b>	Knowledge of a minimum of one foreign language,	√
<b>7c</b>	Ability to write effective reports and comprehend written reports, prepare design and production reports,	√
<b>7d</b>	Ability to make effective presentations,	√
<b>8a</b>	Recognition of the need for lifelong learning, ability to access information, ability to follow developments in science and technology,	√
<b>8b</b>	Ability to continue to educate him/herself.	√
<b>9a</b>	Consciousness to behave according to ethical principles and professional and ethical responsibility.	√

<b>ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION</b>			
Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Course Duration	14	3	42
Hours for off-the-classroom study (Pre-study, practice)	11	4	44
Homework	2	8	16
Project (Teamwork studies)	1	24	24
Final	1	2	2
<b>Total Work Load</b>			128
<b>Total Work Load / 25 (h)</b>			5.1
<b>ECTS Credit of the Course</b>			5

Prepared by: Assist.Prof.Dr. Özgür Köylüoğlu	Preparation date: 23.05.2024
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