ARKIN UNIVERSITY OF CREATIVE ARTS AND DESIGN
GRADUATE EDUCATION AND RESEARCH INSTITUTE
ARCHITECTURE DOCTORAL (PhD) PROFICIENCY EXAM GUIDE

The proficiency examination is conducted to assess whether a student who has completed coursework and the required seminar possesses the fundamental subjects and concepts in their field, as well as the scientific research depth related to their doctoral study. A student admitted with a master's degree must take the proficiency examination no later than the end of the fifth semester, and a student admitted with a bachelor's degree must take it no later than the end of the seventh semester. To sit for the PhD proficiency examination, students must have completed their coursework and seminar, and they must register for this course at the beginning of the semester in which they will take the exam. The candidate must obtain approval from their supervisor to take the exam and submit a petition to the department at least one month before the exam date. The candidate is also required to submit the written text prepared for the oral examination (field exam) along with the petition. If the candidate fails the PhD proficiency examination, they are granted a second opportunity in the following exam period. Candidates who fail the exam on their second attempt are dismissed from the doctoral program.

The PhD proficiency examination consists of written and oral components designed to assess the student's competency in the relevant academic field and inclination toward research. Only students who pass the written examination are allowed to proceed to the oral component. A candidate is deemed successful if they pass both components.

- The dates of the PhD proficiency examination are determined by the Institute Administrative Board and announced on the Institute's website for the fall and spring semesters.
- The combined weight of the written and oral examinations in the overall evaluation is 50%.
- The written examination is administered in a single session.
- The duration of the exam is 180 minutes.
- The written component covers a total of 7 areas. Examination questions may include topics listed under undergraduate, master's, and doctoral-level fundamental subjects. The courses covering these topics at the undergraduate, master's, and doctoral levels are listed below.
- The written examination includes one question from each area. Students must answer 4 of these questions.
- Each answered question in the written exam is evaluated out of 25 points. To pass the written exam, the student must score at least 75 out of 100.
- The oral component may include questions covering the topics from the written section, the special areas of study listed under the oral examination topics, and subjects related to the candidate's doctoral dissertation.
- To be considered successful, students must pass both the written and oral components, scoring no less than 75 on the written exam and no less than 60 on the oral exam, with an overall average score of at least 75.

WRITTEN EXAM

- The written examination covers 7 areas.
- There is one question from each area, and the student is required to answer five of these questions..

Architecture, Science and Technology	
Related Topics	ARCH 108 Technology & Science in Architecture 1 ARCH 207 Technology & Science in Architecture 2 ARCH 208 Technology & Science in Architecture 3
Topics	• To understand the relationship between graphical and analytical representations in the interdisciplinary approach of architecture and mathematics. • To comprehend the properties of materials in architecture and their suitability for design. • To examine the physical properties of materials used in various structures and structural elements, and to question the types of structural components for which they are appropriate. • To understand the pragmatic and semantic criteria in material suitability and selection. • To understand how and to what extent emerging technologies in architecture influence spatial and structural conditions. • …
Basic Sources	Ching, F. D. (2014). *Architecture: Form, space, and order*. John Wiley & Sons. Panero, J., & Zelnik, M. (2014). *Human dimension and interior space: a source book of design reference standards*. Watson-Guptill. Rowland, I.D., & Howe, T.N. (Eds.). (2001). *Vitruvius: 'Ten Books on Architecture*'. Cambridge University Press. Binggeli, C. (2008). *Materials for interior environments*. John Wiley & Sons Marios, S., Domone P. (2017). *Construction materials: Their Nature and Behaviour*. Fifth Edition. CRC Press: Taylor & Francis. ISBN 978 1 4987 4110 1. Surinder, S.V., Robert Waters, R. (2017). *Construction Science and Materials*. 2nd Edition. Willey. ISBN 968 1 1192 4505 6. Malcolm, M. (2017). *Building structures: understanding the basics*. 3rd edition. New York: Routledge. ISBN 978 1 138 11974 1. Gordon E.G. (2003). *Structures: Or why things don't fall down*. Da Capo Press. ISBN 968 0 306 81283 5. Francis D.K. Ching. (2013). *Building structures illustrated: Patterns, systems, and design*. 2nd Edition. Willey. ISBN 968 1 118 45835 8.
Architecture and Universal Design	

Related Topics	ARCH 205 Universal Design 1 ARCH 206 Universal Design 2 ARCH 305 Universal Design 3
Topics	• Exploring universal design principles, appropriate design solutions and tools. • Questioning design solutions legally and ethically in the context of sustainability and accessibility. • Introduction to the contribution of design ethics and eco-design legislation to sustainable design practice. • Understanding the social and physical effects and possible contribution of design on people and the environment. • Learning universal sustainable design approaches. • ...
Basic Sources	Goldsmith, S. (2007). *Universal design*. Routledge. Preiser, W. F., & Smith, K. H. (2011). *Universal design at the urban scale*. *Universal Design Handbook (2 ed., pp. 20.1-20.8). New York: Mcraw-Hill*. Steinfeld, E., & Maisel, J. (2012). *Universal design: Creating inclusive environments*. John Wiley & Sons. Hamraie, A. (2017). *Building access: Universal design and the politics of disability*. University of Minnesota Press. Pierce, D. (2012). *The accessible home: designing for all ages and abilities*. Taunton Press. Boys, J. (2014). *Doing disability differently: An alternative handbook on architecture, dis/ability and designing for everyday life*. Routledge.
Architecture, City and Space	
Related Topics	ARCH 303 Architecture and the City
Topics	• To learn the structure of cities, approaches to urban change, and theories of urban transformation. • To comprehend the principles of urban form and proposals related to urban design and planning. • …
Basic Sources	David, A. (2012). *Shaping places: Urban planning, design and development*. New York: Routledge. ISBN 968 0 415 46796 1. Peter, H. (2014). *Cities of tomorrow - An intellectual history of urban planning and design since 1880 4th edition*. UK: Willey. ISBN 968 1 118 45647 7. *Elizabeth, M.G. (2019). Transformations: Art and the City (Mediated Cities).* Chicago: Intellect. ISBN 798 1 78320 772 5. David, C. (1996). *Lifestyles (Key Ideas)* (Paperback), Routledge.

Architecture, Art and Design	
Related Topics	ARCH 506 Critical Questioning on Contemporary Architectural Theories
Topics	• To gain knowledge about architectural theories, movements, paradigms, and concepts developed in the modern period. • To understand the interaction between architecture and art. • To learn contemporary architectural paradigms, design examples, and socio-cultural and technological issues. • To be introduced to postmodern architectural theories, movements, and design approaches; to evaluate them and learn their fundamental concepts and principles. • To understand the content and principles of theoretical approaches and to conduct critical evaluations. • …
Basic Sources	Bernard, T. (1996). *Architecture and disjunction*. MIT Press. Bernard, T. (1994). *Event-Cities*. MIT Press. Alan, F. (2007). *Designing the Sustainable School*. The Images Publishing Group. Jenks, D. (2003). *Theories and manifestoes of contemporary architecture* (Ed: Kropf K.). Wiley Academy.
Architecture and Design Theories	
Related Topics	ARCH 501 Architectural Design Studio ARCH 506 Critical Questioning Contemporary Architectural Theories
Topics	• Introduction to the relationship between architecture, society, and culture. • To learn architectural design strategies. • Architectural design research and research-by-design. • Introduction to urban architecture. • To understand sustainable architecture and related contemporary approaches. • …
Basic Sources	Aureli, P. (2011). *The possibility of an absolute architecture*. The MIT Press. Sadler, S. (2005). *Archigram: Architecture without architecture*. Cambridge, MA: The MIT Press. Schaik, M.V., Máčel, O.E. (2004). *Utopia: Architectural provocations*, 1956- 76. Prestel Publishing. Edward, T.W. (2014). *Concept sourcebook: A vocabulary of architectural forms*. Reformatted edition. Arch iBasics Press. Brian, L. (1990). *How designers think*. Second Edition. Butterworth Heinemann Ltd. Oxford.

Research Methods	
Related Topics	GRAD501 Research Methods and Ethics ARCH 505 Architectural Theory History, 18-20th Centuries
Topics	• To understand what scientific research is and what it is not. • To raise awareness of key aspects of the nature of knowledge and the value of the scientific method. • To discuss what constitutes a research project, a research problem, and a researchable question. • To evaluate the literature and develop various sources related to research objectives. • To identify and justify the fundamental components of a research framework related to the research problem. • To explain how researchers collect research data. • To learn how to cite sources using the American Psychological Association (APA) style. • To acquire the appropriate language required for academic written work. • To produce a reliable research proposal. • To recognize and avoid common mistakes in the field of research methodology.
Basic Sources	American Psychological Association (2010). Publication manual of the American Psychological Association (6th ed.). Washington, DC: Author. Babbie, Earl. The Practice of Social Research with CourseMate 13th Edition. Cengage Learning. Candy, L. and Edmonds, E.A. (2011), Interacting: Art, Research and the Creative Practitioner, Faringdon, UK: Libri Publications Ltd. DiTiberio, J. K. & Jensen, G. H. (1995). Writing and personality: Finding your voice, your style, your way. Palo Alto, CA: Davies-Black Publishing. Kara, Helen, Gergen, Kenneth J., Gergen, Mary M. (2014). Creative Research Methods in the Social Sciences: A Practical Guide: Policy Press. ISBN: 978-1447316275 Lucas, Ray (2016). Reseach Methods for Architecture. UK: Laurence King Publishing. Neuman, W.L. (2004). Basics of social research: Qualitative and quantitative approaches. Boston: Pearson Education/Allyn and Bacon. ISBN: 0-205-355788-1. Sheppard, Valerıe, Research Methods for the Social Sciences: An Introduction, BCCampus- e-book: https://pressbooks.bccampus.ca/jibcresearchmethods/ Somekh, B& Lewin, C. (2004). Research Methods in the Social Sciences. SAGE Publications Inc. ISBN:978-0761944027 Sullivan, G. (2010), Art Practice as Research: Inquiry in Visual Arts, 2nd Ed, Sage.
Scientific Research Methods and Techniques in Architecture	

Related Topics	ARCH 601 Advanced Research Methods and Scientific Ethics
Topics	• To introduce current research methods and tools in architecture. • To examine research processes in design, social sciences and art studies. • To grasp research methods, data collection, data analysis and synthesis in design, social sciences and art studies. • To develop the ability to read academic texts with a critical approach and write scientific texts. • ...
Basic Sources	Erman, E. (2009). *Mimarlıkta bilimsel araştırma yöntemleri ve tez yazım teknikleri*. Beşir Kitapevi. Niezabitowska, E.D. (2018). Research methods and techniques in Architecture 1st Edition. Routledge. Aksamija, A. (2021). Research methods for the architectural profession. 1st Edition. Routledge. Groat, L.N., Wang, D. (2013). Architectural research methods, 2nd Edition. Wiley.

ORAL EXAM (Field Exam)

Purpose of the Exam

The evaluation of the student's ability and potential to carry out research at the doctoral level and to encourage the student to begin research early.

Pre-Exam Expectations from the Student

- The student selects a topic within the field in which they will pursue their doctoral studies.
- The student contributes to the selected topic in one of the forms specified below.
- The student prepares a written text of no fewer than 6 and no more than 8 pages in the format of a "Thesis Proposal."
- An Originality Report must be prepared for this text and signed by the thesis supervisor. The maximum similarity rate is 20%. The Originality Report is obtained using plagiarism detection software such as Turnitin (http://www.turnitin.com) or iThenticate (http://www.ithenticate.com). For the originality report, submitting the first page of the similarity index is sufficient.
- The candidate submits the prepared text, together with the Originality Report and the examination application petition, no later than one month before the exam.

Expectations from the Student During the Exam

- To present their work in a presentation lasting no more than 20 minutes.
- To answer questions related to the 20-minute presentation.

- To answer questions for 20 minutes on a general field selected independently of the presentation topic (the Q&A period may be extended if deemed necessary by the jury).

Expected Contribution

The student may choose to contribute in one or more of the following types:

- **Literature Review:** A literature summary is expected in every study; however, a student selecting this category is required to investigate the literature in greater depth, compare previous studies by identifying their advantages and disadvantages, and, in short, analyze and synthesize the literature on the chosen topic.
- **Implementation:** The student is expected to apply the methods presented in an article selected together with the supervisor, produce results, and, if applicable, conduct trials by modifying various parameters.
- **Original Method:** The student is expected to propose an original method on a selected topic and produce results by implementing this method.
- **Comparison:** The student is expected to compare multiple methods—selected jointly with the supervisor, either theoretically or experimentally, and discuss and evaluate the outcomes of this comparison.
- **Theoretical Contribution:** The student is expected to develop a new theoretical approach (such as a formula, theory, proof, etc.) and demonstrate its validity, applicability, and underlying logic.
- **Case Study:** The student is expected to apply a method or process from the literature to a realistic problem and evaluate the resulting outcomes.

Scoring

The student's performance in the oral examination is evaluated according to the scoring table provided below. According to this table, a candidate who receives a score of 60 or above from a jury member is considered "successful" by that member. A candidate who is found successful by at least three jury members is deemed to have passed the Qualification Exam.

Proportional Distribution		**Score (0-100)**
40%	Written text	
20%	Presentation and presentation-related questions	
40%	General questions on the selected field	
	Weighted Total:	

General Principles Regarding the Administration of the Exam

- For each student taking the examination, the PhD Proficiency Committee appoints five jury members who hold a doctoral degree and are experts in the relevant field, including the student's advisor. It is essential that the jury members read the student's submitted text before the examination and prepare the questions they will ask during the exam.

- The PhD Proficiency Committee appoints one of the jury members as the chair. The jury chair is responsible for conducting and overseeing the examination.
- The written text prepared by the student must be original. It must not consist of quotations compiled from other works.
- Jury members may conduct plagiarism checks on the written texts submitted by students using Turnitin (http://www.turnitin.com), of which our university is a member.
- A study previously prepared for a master's thesis may not be used directly for this examination. Even if the topic has not changed, the student is expected to have made an additional contribution beyond the master's work.
- An article for which the student is the primary author (whether accepted for publication or not) may be used for this examination. The article to be presented must not have been used previously by another student for this exam. If the article has been published elsewhere, no more than 12 months must have passed since its publication date.
- In the case of failure on the first attempt, a new topic will be determined, or if the presented work will be continued, the jury will inform the student about the expectations for the second attempt.
- If the student takes the examination a second time, they must submit an additional document explaining the changes made, together with the final version of their work, to the jury.