



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

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|--|---|--|----------------------|--|---|--------------------------------|---|------------|---|
| Course Title | | Philosophy of Science | | | | | | | |
| Course Code | | EYT612 | | Course Level | | Third Cycle (Doctorate Degree) | | | |
| ECTS Credit | 5 | Workload | 125 (<i>Hours</i>) | Theory | 3 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | | This course aims to develop comprehension about the foundations of educational administration among the doctorate candidates of educational administration | | | | | | | |
| Course Content | | Science, Positivism, post-positivism, history of science, methods in science, anarchist science thought, scientific revolutions, objectivity in science | | | | | | | |
| Work Placement | | N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods | | | | Explanation (Presentation), Discussion, Case Study, Individual Study | | | | | |
| Name of Lecturer(s) | | | | | | | | | |

Assessment Methods and Criteria

| Method | Quantity | Percentage (%) |
|---------------------|----------|----------------|
| Midterm Examination | 1 | 40 |
| Final Examination | 1 | 60 |

Recommended or Required Reading

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| 1 | Demir, Ö. (2018) Bilim felsefesi, Bursa: Sentez Yayıncılık |
| 2 | Frank, P. (2017) Bilim felsefesi: Bilim ve felsefe arasındaki bağ, Çeviren: Dilek Kadioğlu, İstanbul: Say Yayınları |
| 3 | Gillies, D. (2018) Yirminci yüzyılda bilim felsefesi: Dört ana tema, Çeviren: Melis Tuncel, Ankara: Nobel Yayıncılık |
| 4 | Gimbel, S. (2017) Bilimsel yöntemin izinde: Bilim felsefesinin öğretilmesinde yeni bir yaklaşım, Çeviren: Özlem Ünlü, Ankara: Dipnot Yayınları |
| 5 | Güzel, C. (2014) Bilim felsefesi, Ankara: Bilgesu Yayınları |
| 6 | Kabadayı, T. (2011) Duhem'dan Laudan'a çağdaş bilim felsefecileri, Ankara: Bilgesu Yayınları |
| 7 | Lecourt D. (2001) Bilim felsefesi, Çeviren: Işık Ergüden, Ankara: Dost Kitabevi |
| 8 | Losee, J. (2012) Bilim felsefesine tarihsel bir giriş, Çeviren: Elif Derviş, Ankara: Dost Kitabevi |
| 9 | Özlem, D. (2016) Bilim felsefesi, İstanbul: Notos Kitap Yayıncılık |
| 10 | Rosenberg, A. (2017) Bilim felsefesi: çağdaş bir giriş, Çeviren: İbrahim Yıldız, Ankara: Dipnot Yayınları |
| 11 | Yıldırım, C. (2012) Bilim felsefesi, İstanbul: Remzi Kitabevi |

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|--|
| 1 | Theoretical | Introduction |
| 2 | Theoretical | What is science? Concepts of science, the problem of scientificity |
| 3 | Theoretical | Francis Bacon: Epagoge of Aristo and reasoning of Bacon |
| 4 | Theoretical | Common method in the philosophy of reasonable positivism: Deductive-theory scientific of suitable theory model |
| 5 | Theoretical | Post-positivism and scientific view to the science. Metaphysic-science conflict |
| 6 | Theoretical | Theories of possibility, different variables towards possibility, possibility in science and scientific research |
| 7 | Theoretical | Alexandre Koyré: Studies on the history of science |
| 8 | Intermediate Exam | Midterm Exam |



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| 9 | Theoretical | Karl R. Popper: Logic of scientific research |
| 10 | Theoretical | Quine-Duhem: Two dogmas of empiricism |
| 11 | Theoretical | Imre Lakatos: Methodology of research programs |
| 12 | Theoretical | Paul K. Feyerabend: Anarchist science view |
| 13 | Theoretical | Thomas Kuhn: Structure of scientific revolutions |
| 14 | Theoretical | Relativity, objectivity in science and the value of science |
| 15 | Theoretical | General Evaluation |
| 16 | Final Exam | Final Exam |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|--|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 5 | 3 | 112 |
| Midterm Examination | 1 | 5 | 1 | 6 |
| Final Examination | 1 | 6 | 1 | 7 |
| Total Workload (Hours) | | | | 125 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 5 |

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

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| 1 | To be able to interpret the relationship between science and philosophy |
| 2 | To be able to analyze critically different and alternative approaches in philosophy of science |
| 3 | To be able to analyze the relationship between philosophy of science and doing scientific research in educational administration |
| 4 | To be able to analyze the scientific characteristics of educational administration |
| 5 | To be able to compose the philosophical basis for designed research and science activities |

Programme Outcomes (Educational Administration Supervision Planning and Economics Doctorate)

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| 1 | Deepening common knowledge accumulation concerning the educational science in the frame of basic theory and practices of EASPE (Educational Administration Supervision Planning and Economics). |
| 2 | Analyzing sub-subjects of Educational Administration Supervision Planning and Economics. |
| 3 | Comprehending the relationship between the other disciplines like sociology, philosophy, administration, economy, politics and EASPE (Educational Administration Supervision Planning and Economics), conducting interdisciplinary studies on the basis of internalized knowledge and skills |
| 4 | Applying accumulated knowledge related to EASPE to improve and managing educational organizations in different levels. |
| 5 | Defining problems in administration and supervision of educational system and developing new perspectives in the light of knowledge gathered from the other disciplines |
| 6 | Defining problems of EASPE in the frame of scientific problem solving; developing solution proposals by using quantitative and qualitative research methods |
| 7 | Getting skills of using statistical software in order to carry out scientific research and using required technologies. |
| 8 | Developing solution models in the light of theories and approaches of EASPE and applying the models to whole system. |
| 9 | Getting knowledge and research methods in order to carry out original scientific researches in the field of EASPE and applying team works for efficient results in interdisciplinary studies |
| 10 | Handling theories, hypothesis, opinions in the field of EASPE with an objective skeptic, logical, analytical manner and evaluating them in critical point of view. |
| 11 | Being aware of lifelong learning in terms of the field of EASPE and personal development and internalizing the principles of lifelong learning, personal development |
| 12 | Transferring the current developments and scientific studies to the people and institutions in and out of the field by visually, verbally, systematically and in written |



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| 13 | Managing the social dynamics of relationships in order to enact people and applying needed leadership strategies in social and educational environments |
| 14 | Following national and international publications and attending social interactions and scientific studies in international level; communicating in at least in one foreign language at least in order to share studies international level. |
| 15 | Interpreting strategies, politics and plans related to educational system in terms of theories and principles of educational administration and supervision; and evaluating the results in terms of international quality standards. |

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

| | L1 | L2 | L3 | L4 | L5 |
|-----|----|----|----|----|----|
| P1 | 5 | 5 | 5 | 5 | 5 |
| P2 | 5 | 5 | 5 | 5 | 5 |
| P3 | 5 | 5 | 5 | 5 | 5 |
| P4 | 5 | 5 | 5 | 5 | 5 |
| P5 | 5 | 5 | 5 | 5 | 5 |
| P6 | 5 | 5 | 5 | 5 | 5 |
| P7 | 5 | 5 | 5 | 5 | 5 |
| P8 | 5 | 5 | 5 | 5 | 5 |
| P9 | 5 | 5 | 5 | 5 | 5 |
| P10 | 5 | 5 | 5 | 5 | 5 |
| P11 | 5 | 5 | 5 | 5 | 5 |
| P12 | 5 | 5 | 5 | 5 | 5 |
| P13 | 5 | 5 | 5 | 5 | 5 |
| P14 | 5 | 5 | 5 | 5 | 5 |
| P15 | 5 | 5 | 5 | 5 | 5 |

