Educational Research Methodology and Statistics Program (Doctorate program)

1. General Information

Educational Research Methodology and Statistics Program has accepted its first students in the 2012-2013 academic year and continues to provide graduate education at the moment. 5 students seeking a career in research methodology and statistics are accepted in this program.

Educational Research Methodology and Statistics Doctorate Program includes disciplines like educational research methodology, quantitative research, qualitative research, multivariate statistics, applied statistics, measurement and evaluation, program evaluation, classroom assessment, educational policy and scale development. This area of expertise as an education level emphasizes research and improvement on the educational research methodology. Hence this program is aimed to train qualified experts in the field of research methodology who have planning, organizing, supervisory and developing traits to make effective and efficient planning; use knowledge, skills and advanced technology effectively through high-quality service; interrogate scientific developments by using them in professional and academic areas.

2. Acquired Degree

Students who successfully complete the program are received Doctorate Degree in the field of Educational Research Methodology and Statistics.

3. Level of Degree

Doctorate degree (Ph. D.)

4. Admission Requirements

In order to start Educational Research Methodology and Statistics Doctorate Program, 5th and 11th Articles for student acceptance in Eskişehir Osmangazi University Graduate Education Regulations are taken into consideration.

5. Recognition of Prior Learning

Acceptance of transfer students for doctorate Program of Educational Research Methodology and Statistics is performed on the basis of 28th Article in Eskişehir Osmangazi University Graduate Education Regulations.

Acceptance of preparation students for doctorate Program of Educational Research Methodology and Statistics is performed on the basis of 29th Article in Eskişehir Osmangazi University Graduate Education Regulations.

6. Qualification Requirements and Regulations

Educational Research Methodology and Statistics Doctorate Program comprises less than a total of 30 credits which corresponds to at least 10 courses, one seminar course and thesis work for students who graduated from a master's degree program. Educational Research Methodology and Statistics Doctorate Program comprises less than a total of 48 credits which corresponds to at least 16 courses, one seminar course and thesis work for students who graduated from a bachelor degree program. Non-credit seminar course and thesis work are evaluated by satisfactory or unsatisfactory.

7. Program Profile (The Purpose)

Major aims of the program;

- *to develop different solutions to problems of research methodology and statistics and provide new insights in the field of educational research methodology.*
- *to train qualified experts in the field of educational research methodology who interrogate scientific developments by using them in professional and academic areas, use various scientific techniques effectively, and do original and beneficial research in the educational research methodology and statistics.*

- *to train experts in the field of educational research methodology who can educate skilled graduate and undergraduate students in the field of education*

8. Program Qualifications (Learning Outcomes)

At the end of the doctorate program, students will be able to;

- *identify problem areas in the field of educational research methodology by acquiring doctorate degree level of knowledge, experience and research capabilities.*
- *access original information from information about the field of educational research methodology and statistics by using quantitative and qualitative research skills.*
- *review current and complex issues relating to the field of educational research methodology by taking advantage of method, design and application of other disciplines.*
- *make scientific publications on national and international level in the field of educational research methodology.*
- *participate in educational and training activities in the field of educational research methodology and to lead the spread of these activities.*
- *reflect to ethical principles to fields in her/his life.*
- *design practical steps by developing effective training and management strategies*
- *contribute the field of educational research methodology with the original ideas and studies at the scientific meetings.*
- *develop competence in following international literature in the field of educational research methodology.*
- *communicate effectively with the the workers, policy makers and practitioners to support the field with national, international and interdisciplinary studies.*
- *develop strategies and information which improve higher education organizations structural and functional aspects.*
- *produce projects which facilitate the educational research organizations to fulfill their roles in the economic, social, political and cultural development.*
- *follow closely the political, social, cultural, economic and international developments which is the dominant educational research and statistics.*
- *have the facilities and competence to lead educational research organizations.*
- *improve his/her knowledge and skills to make interdisciplinary studies based on comprehending the relationship between other interdisciplinary studies such as sociology, philosophy, political science, anthropology, management science, behavioral science, psychology, literature and economics.*

9. Graduate Employment Opportunities

Students who complete the Doctorate Degree Program in Educational Research Methodology and Statistics can be employed as a researcher in educational statistics and research centers in universities. At the same time, students can work in Educaitonal Measurement and Evaluation departments.

10. Transition to Next Degree Programs

Candidates who successfully complete doctorate education can study in their field or related field PhD programs on condition that they take ALES or equivalent exams and have adequate level of foreign language knowledge. They can also work as a research assisstants in the Schools of Education.

11. Testing, Measurement and Evaluation

Evaluation and assessment methods for each course are defined in detail in "Course Information Form".

12. Graduation Requirements

Graduation requirements are as described in "Qualification Requirements and Regulations" section.

13. Mode of Study (Full-Time, e-learning)

Full time

14. Adress and Contact Information (Department/Program Heads, Assistant Heads and Erasmus Coordinator)

Eskişehir Osmangazi University
Faculty of Education
Graduate School of Educational Sciences
Meşelik Campus 26480 Eskişehir

Director Prof. Dr. Ahmet Aypay
E-mail: aypaya@yahoo.com
Phone: 0 (222) 239 37 50/1627

Vice Director Assoc. Prof. Dr. Özden Tezel
E-mail: otezel@ogu.edu.tr
Phone: 0 (222) 239 37 50/1641

Vice Director Assist. Prof. Dr. Ali Eryılmaz
E-mail: erali76@hotmail.com
Phone: 0 (222) 239 37 50/1637

Erasmus Coordinator: Assist. Prof. Dr. İlknur ŞENTÜRK
E-mail: ilknurkokcu@gmail.com
Phone: 0 (222) 239 37 50/1674

15. Department/Program Facilities

Number of faculty members involved in this program is 13, including 4 professors, 4 associate professors and 5 assistant professors. There are 25 computers, 4 printers, 2 browsers and 5 projections in the department. These equipments are used by students and teachers inside and outside the classrooms for the purposes of literature review, project and seminar preparation, and making presentations. Faculty and the central library computers are available for use throughout the week during office hours.The number of open terminal to graduate students and / or the number of personal computers is 225. Faculty and the central library computers are available for use throughout the week during office hours.

16. Academic Staff

Prof. Dr. Ahmet Aypay - Department of Educational Sciences, Educational Administration, Supervision, Planning and Economics Program

Prof. Dr. Selahattin Turan - Department of Educational Sciences, Educational Administration, Supervision, Planning and Economics Program

Prof. Dr. Ayhan Aydın - Department of Educational Sciences, Educational Administration, Supervision, Planning and Economics Program

Assist. Prof. Dr. İlknur Şentürk - Department of Educational Sciences, Educational Administration, Supervision, Planning and Economics Program

Prof. Dr. Bahaddin Acat - Department of Educational Sciences, Curriculum and Instruction Program

Prof. Dr. Zühal Çubukçu - Department of Educational Sciences, Curriculum and Instruction Program

Prof. Dr. Cemil Yücel - Department of Elementary Education, Elementary Classroom Teacher Education Program

Assoc. Prof. Dr. Engin Karadağ - Department of Elementary Education, Elementary Classroom Teacher Education Program

Assist. Prof. Dr. İsmail Yüksel - Department of Educational Sciences, Curriculum and Instruction Program

Assist. Prof. Dr. Fatih Bektaş - Department of Educational Measurement and Evaluation Program

Assist. Prof. Dr. Derya Yılmaz - Department of Educational Measurement and Evaluation Program

Assist. Prof. Dr. Hamit Özen - Department of Educational Measurement and Evaluation Program

Assist. Prof. Dr. Odilea Rocha Erkaya - Department of Educational Sciences, Educational Administration, Supervision, Planning and Economics Program

Assist. Prof. Dr. Ümit Özkaya - Department of Educational Sciences, Curriculum and Instruction Program

17. Courses – ECTS Credits

For detailed information like objectives, learning outcomes, content, assessment, workload and ECTS of any course, click on the name of the course in the following table.

EDUCATIONAL RESEARCH METHODOLOGY AND STATISTICS DOCTORATE PROGRAM					
Course Code	**Course Name**	**ECTS**	**T+P+L**	**C/E**	**Language**
Fall Semester (I. Semester)					
543611801	Introduction to Educational Research	10	3+0+3	C	Turkish
543611802	Education Statistics I	10	3+0+3	C	Turkish
543611803	Introduction to Qualitative Analysis	10	3+0+3	C	Turkish
Total Credit		**30**	**9**		
Spring Semester (II. Semester)					
	Seçmeli I*	10	3+0+3	E	Turkish
	Seçmeli II*	10	3+0+3	E	Turkish
	Seçmeli III*	10	3+0+3	E	Turkish
Total Credit		**30**	**9**		

ESOGU Department of Educational Sciences
Course Information Form

SEMESTER	Fall

COURSE CODE	543611801	COURSE NAME	Introduction to Educational Research

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Laboratory	Credit	ECTS	TYPE	LANGUAGE
SPRING	3	0	0	3	10	COMPULSORY (X) ELECTIVE ( )	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Primary School Teaching [if it contains considerable design, mark with (√)]	Social Science
% 25	% 50		% 25
% 50			

	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	30
	Quiz		
	Homework	1	20
	Project		
	Report		
	Others (presentation, summary of the presented discussion)		
FINAL EXAM		1	50

PREREQUIEITE(S)	-
COURSE DESCRIPTION	This course includes issues such as definition and basic properties of educational research, ways to access information, resarch methods used in the field of education, quantitative, qualitative, and mixed model, problem, review of literature, research design, population and sampling, data collection and data collection methods, recording, analyzing, interpretation and reporting of data. The main scope of this course to analyze research models anad major themes used in educational sciences.
COURSE OBJECTIVES	The objective of this course is to gain ability for analyzing main aspects of a research.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	1. to develop understandings about the role of research in science –especially in knowledge management 2. to gain knowledge about research processes and research methods 3. to analyze research in knowledge management field and gaining evaluation ability 4. to think systematically for solving problems in knowledge management field and perform analytical methods 5. to teach data collection, data analysis and evaluation techniques 6. to gain knowledge in writing research proposal and preparing research report
TEXTBOOK	• McMillan, J. H., & Schumacher, S. (2006). Research in education: Evidence based inquiry. Boston, MA: Brown and Company.
OTHER REFERENCES	• Cohen, L., Manion, L., & Morrison, K. (2007). Research methods in education. New York: Routledge. • Muijs, D. (2004). Doing quantitative research in education: With SPSS. London: Sage. • APA (2009). Amerikan Psikoloji Derneği yayım kılavuzu. İstanbul: Kaknüs Yayınları. • Neuman, W. Lawrence (2008). Toplumsal araştırma yöntemleri. İstanbul: Yayınodası Yayıncılık. • Punch, Keith F. (2005). Sosyal araştırmalara giriş: Nitel ve nicel yaklaşımlar. İstanbul: Siyasal Kitapevi. • Sipahi, B., Yurtkoru, E. S., & Çinko, M. (2010). Sosyal bilimlerde SPSS'le veri analizi. İstanbul: Beta Yayınları.

	• Türkiye Bilimler Akademisi (2002). Bilimsel araştırmada etik ve sorunları. Ankara: TUBA
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Basic principles in educational research
2	Problem/Purpose
3	Literature Review
4	Qualitative and Quantitative Research Designs
5	Sampling
6	Experimental Research
7-8	MID-TERM EXAM
9	Survey research – Correlational research
10	Causal Research
11	Qualitative and quantitative measurement
12	Quantitative data analysis
13	Writing research report
14	Course evaluation
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process			X
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.			X
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.		X	
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.			X
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.			
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution	X		

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611802	COURSE NAME	Education Statistics I

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY (X) ELECTIVE ( )	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	40
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	
COURSE DESCRIPTION	This course includes issues such as basic concepts about statistic (population, sample, parameter, statistic, variable, variables types, measurement, scale, scales types, distribution), sampling methods, theoretical distributions, central tendency (mean, mod, median) and dispersion (range, standard deviation, variance, standard error, variation coefficient), hypothetical tests.
COURSE OBJECTIVES	In this course, it is aimed to students know the basic concepts about statistics, to examine and interpret the relationships between variables using hypothesis tests.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	-
COURSE OUTCOMES	At the end of this course, students will be able to 1. know the basic concepts about statistics. 2. understand differences in sampling methods. 3. know theoretical distributions. 5. test hypothesis by means of a statistical package program. 6. interpret findings obtained as a result of analysis
TEXTBOOK	• Arıcıgil Çilan, Ç. (2009). *Sosyal bilimlerde kategorik verilerle ilişki analizi*. Ankara: PegemA. • Büyüköztürk, Ş. (2007). *Sosyal bilimler için veri analizi el kitabı.* Ankara: PegemA. • Büyüköztürk, Ş., Bökeoğlu, Ö.Ç. ve Köklü, N. (2009). *Sosyal Bilimler İçin İstatistik (4. Baskı).* Ankara: PegemA. • Field, A. ve Hole, G. (2003). *How to design and report experiments*. London: Sage. • Kalaycı, Ş. (Ed.) (2010). *SPSS uygulamalı çok değişkenli istatistik teknikleri (5. Baskı).* Ankara: Asil. • Şencan, H. (2005). *Sosyal ve davranışsal ölçümlerde güvenirlik ve geçerlik*. Ankara: Seçkin. • Tacq, J. (1997). *Multivariate Analysis Techniques in social science research from problem to anaysis.* London: Sage. • Tavşancıl, E. (2010). *Tutumların ölçülmesi ve SPSS ile veri analizi (4. Baskı)*. Ankara: Nobel.
OTHER REFERENCES	• Long, J. S. (1997). *Regression models for categorical and limited dependent variables.* London: Sage. • Fraenkel, J. R. Ve Wallen, N. E. (2005). *How to design and evaluate*

	research in education (6th ed.). Boston: Mc Graw Hill. • McMillan, J. H. Ve Schumacher, S. (2006). *Research in education: Evidence-based inquiry (6th ed.).*Boston: Pearson.
TOOLS AND EQUIPMENTS REQUIRED	Computer, a statistical package program

COURSE SYLLABUS	
WEEK	**TOPICS**
1	main knowledge related statistic terms (population, sample, parameter, statistic, variable, variables types)
2	main knowledge related statistic terms (measurement, scale, scales types, distribution),
3	Sampling methods
4	Theoretical distributions
5	central tendency (mean, mod, median)
6	dispersion (range, standard deviation, variance, standard error, variation coefficient),
7-8	MID-TERM EXAM
9	Data analysis with SPSS
10	parametric tests
11	nonparametric tests
12	Validity
13	Reliability
14	multivariable statistics
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.	X		
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.			X
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.			X
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.			X
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611803	COURSE NAME	Introduction to Qualitative Analysis

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY (X) ELECTIVE ( )	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Science Education [if it contains considerable design, mark with (√)]	Social Science
	%80		%20

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	30
	Quiz		
	Homework		
	Project	1	30
	Report		
	Others (……)		
FINAL EXAM		1	40

PREREQUIEITE(S)	-
COURSE DESCRIPTION	- Definition and characteristics of qualitative research - Theoretical foundations of qualitative research design - Differences between qualitative and quantitative research - Qualitative research designs (ethnography, case study, phenomenology, grounded theory, action research) - Basic steps of qualitative research, - Implementation of qualitative data analysis, - Qualitative research methods - Qualitative data analysis (content analysis, descriptive analysis) - Interpretation of results and reporting - Examination of a sample qualitative research topic, cover the content of this course.
COURSE OBJECTIVES	The main purpose of this course to help students to be able to understand and explain theoretical and conceptual knowledge about qualitative research techniques, to develop a research proposal, to perform a qualitative research, to interpret results and to report findings.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	At the end of the course, the students should be able to: 1. understand theoretical foundations of qualitative research methods, 2. learn qualitative research designs, 3. comprehend basic steps of qualitative research, 4. perform and interpret qualitative data analysis, 5. use qualitative research methods in education effectively, 6. plan and design a qualitative research independently.
TEXTBOOK	1. Balcı, A. (2000). *Sosyal bilimlerde araştırma.* Ankara: Pegema Yayıncılık. 2. Miles, M. B. & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis*. London: Sage. 3. Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3.Baskı). Sage Publications, Thousand Oaks. 4. Yıldırım, A. & Şimşek, H. (1994). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık. 6. Neuman, W. L. (2000). *Social research methods, qualitative and quantitative approaches*. Boston: Allyn and Bacon. 7. Strauss, A. & Corbin, J. (1998). *Basics of qualitative research*. London: Sage Publications. 8. Articles (will be submitted by the instructor).

OTHER REFERENCES	1. Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass. 2. Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage.
TOOLS AND EQUIPMENTS REQUIRED	-

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Emergence of qualitative research, basic concepts, theoretical foundations and basic characteristics
2	Qualitative research topics in education, differences between qualitative and quantitative research
3	Qualitative research designs [Phenomenology, ethnography, grounded theory, case study, action research]
4	Qualitative research designs [History research (oral history) action research, biography, narratives, hermeneutical]
5	Basic steps of qualitative research
6	Sampling [Purposive sampling techniques]
7-8	MID -TERM
9	Data collecting methods in qualitative research
10	Qualitative data analysis
11	Types of interview and observation, observation records and document analysis
12	Coding of data, formation of categories and themes
13	Validity, reliability and ethics in qualitative research
14	Reporting results
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics		X	
2	to comprehend basic features of scientific research process		X	
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.		X	
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.			X
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.			X
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.		X	
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.		X	
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

EDUCATIONAL RESEARCH METHODOLOGY AND STATISTICS DOCTORATE PROGRAM					
Course Code	**Course Name**	**ECTS**	**T+P+L**	**C/E**	**Language**
Fall Semester (I. Semester)					
543611001	Education Statistics II: Experimental Methods	10	3+0+3	C	Turkish
543611002	Measurement Theory	10	3+0+3	C	Turkish
543611003	Theoretical Perspectives on Educational Policy	10	3+0+3	C	Turkish
543611004	Item Response Theory	10	3+0+3	E	Turkish
543611005	Contemporary Studies in Psychometric Research	10	3+0+3	E	Turkish
543611006	Applied Statistics	10	3+0+3	E	Turkish
543611007	Classroom Assessment	10	3+0+3	E	Turkish
Total Credit		**30**	**12**		
Spring Semester (II. Semester)					
543612001	Education Statistics III: Correlation and Regression	10	3+0+3	C	Turkish
543612002	Tests and Measurements	10	3+0+3	C	Turkish
543612003	Meta Analysis	10	3+0+3	E	Turkish
543612004	Structural Equation Modeling	10	3+0+3	E	Turkish
543612005	Education Statistics IV: Multivariate Statistics	10	3+0+3	E	Turkish
543612006	Program Evaluation Design	10	3+0+3	E	Turkish
543612007	Survey Design and Instrument Construction	10	3+0+3	E	Turkish
Total Credit		**30**	**9**		
Fall Semester (III. Semester)					
543611008	Qualitative Analysis: Advanced	10	3+0+3	C	Turkish
543611009	Computer Assisted Qualitative Data Analysis	10	3+0+3	E	Turkish
543611010	Seminar in Educational Research	10	3+0+3	E	Turkish
543611011	Mixed Method Research Design	10	3+0+3	E	Turkish
543611012	Single Subject Research	10	3+0+3	E	Turkish
543611013	Hierarchical Linear Modeling	10	3+0+3	E	Turkish
543611014	Seminar	10	0+3+0	E	Turkish
Total Credit		**30**	**9**		
Spring Semester (IV. Semester)					
543611701	Ph.D.Proficiency	30	0+1+0	C	Turkish
Total Credit		**30**	**0**		
Fall Semester (V. Semester)					
543612701	Doctoral Thesis	25	0+1+0	C	Turkish
543611901	Special Topics	5	3+0+0	C	Turkish
Total Credit		**30**	**0**		

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611001	COURSE NAME	Education Statistics II: Experimental Methods

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY (X) ELECTIVE ( )	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	40
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	
COURSE DESCRIPTION	This course includes issues such as definition and properties of experimental design, dependent variable, independent variable, control variable, random assignment, control and experimental groups, internal and external validity, experimental design types, data analysis and reporting of experimental research designs.
COURSE OBJECTIVES	By the end of the course students should be able to learn: 1- basic concepts of experimental designs 2- when they should use experimental designs 3- differences between experimental methods.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	students are going to 1- conduct experiments to response psychological research questions. 2- think experimentally when they face to a problem 3- apply their statistical knowledge into experiments 4- be sensitive to ethical issues
TEXTBOOK	• Canavos, G. ve Koutrouvelis, J. (2008). Introduction to the design & analysis of experiments. Boston: Pearson.
OTHER REFERENCES	• Buyukozturk, S. (2007) Deneysel Desenler Ontest-Son Test Kontrol Grubu Veri Analizi. Pegema Yayincilik
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	
1	İntroduction To Experimental Designs
2	Random Designs
3	Blok and Latin Square Designs
4	Factorial Designs
5	Factorial Designs
6	Nested Designs
7-8	Mid Term Exam
9	2F and 3F Factorial Designs
10	Variables at Experiments
11	Hierarchical Factorial Designs
12	General Linear Model
13	General Linear Model
14	Conducting an Experiment
15-16	Final Exam

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.	X		
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.		X	
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.			X
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Spring

COURSE CODE	543611002	COURSE NAME	Measurement Theory

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY (X) ELECTIVE ( )	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	40
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	
COURSE DESCRIPTION	In this course, measurement, measurement scales, classical test theories and item response theory, development of measurement scales, norm setting and standardization, measurement error, concepts of validity and reliability, item analysis, exploratory factor analysis, descriptive statistics, generalizability theory, assessment instruments used in educational research and using computer programs to analyze and test data, will be discussed.
COURSE OBJECTIVES	By the end of the course students should be able to learn: 1- Kinds of validity and reliability 2- Developing measurement scales 3- Differences between CTT nad IRT
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	Developing suitable measurement scales will be achieved at data gathering step.
COURSE OUTCOMES	Students are going to 1- Develop measuremet scales 2- Apply developing measuremet scale steps appropriately. 3- Do reliability and validity analyses.
TEXTBOOK	• Nunnally, J. & Bernstein, I. (1994) Psychometric Theory (3rd Ed.). New York: McGraw Hill. • Allen, M. J. & Yen, W. M. (1979). Introduction to Measurement Theory. Long Grove, IL: Waveland Press.
OTHER REFERENCES	• AERA, APA, & MCME (1999). Standards for educational and psychological testing. Washington, DC: American Psychological Association. • Baker, F. (2001). The basics of item response theory. Eric Clearinghouse on Assessment and Evaluation. College Park, MD: University of Maryland.
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEKS	
1	Introduction, Statistical Foundations Review
2	Scaling and Test Construction
3	Scaling and Test Construction Contd. Introduce the *Standards for Educational and Psychological Testing.
4	Reliability
5	Reliability
6	Validity
7-8	Mid term exam
9	Validity
10	Special Problems in CTT
11	Recent Developments in Test Theory/ IRT
12	Recent Developments in Test Theory/ IRT
13	Factor Analysis/Confirmatory Factor Analysis
14	Factor Analysis/Confirmatory Factor Analysis
15-16	Final

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.			X
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.			X
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.		X	
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.		X	
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGU Department of Educational Sciences
Course Information Form

SEMESTER	2012-2013 Fall

COURSE CODE	543611003	COURSE NAME	Theoretical Perspectives on Educational Policy

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Laboratory	Credit	ECTS	TYPE	LANGUAGE
SPRING	3	0	0	3	10	COMPULSORY (X) ELECTIVE ( )	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Primary School Teaching [if it contains considerable design, mark with (√)]	Social Science
	% 75		% 25
% 50			

	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	30
	Quiz		
	Homework	1	30
	Project		
	Report		
	Others (presentation, summary of the presented discussion)		
FINAL EXAM		1	40

PREREQUIEITE(S)	The short content of this course is research done about educational politics, outcomes of different educational politics approaches, educational research in terms of technical-conceptual and social aspects.
COURSE DESCRIPTION	This course provides an introduction to the field of educational politics with special emphasis on theoretical and conceptual analysis of the political behavior of education's stakeholders and the policy performance of educational systems. Moreover, the course provides to use alternative conceptual frameworks and theories, i.e., political systems, conflict and power, etc., in explaining political behavior in educational settings.
COURSE OBJECTIVES	To explore and understand the importance of educational research in educational politics, to discuss the outcomes of different educational politics approaches, to criticize and develop the educational research in terms of technical-conceptual and social aspects.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	At the end of the course, the students will be able to: 1. Recognizes the relationship between education and politics, 2. Identifies and analyzes the policies of education 3. Recognize the concepts of education policy studies 4. Knows that the contemporary debate about education policies 5. Understand the importance of educational research and educational politics.
TEXTBOOK	• Bolman, L. G. & Deal, T. (2008). Reframing organizations artistry, choice and leadership (4th edition). San Francisco, CA: Jossey-Bass Publishing.
OTHER REFERENCES	• Chubb, J. E. ve Moe T. M. ()1990). Politics, Markets & America's Schools. Washington, D. C.: Brookings Institution. • Crowson, R. L., Boyd, W. L., and Mawhinney, H. B. (1996). The Politics of Education and the New Institutionalism. Washington, D. C. : Falmer Press. • Heck, R. H. ()2004). Studying Educational and Social Policy. London: Routledge. • Peters, B. G. (1993). American Public Policsy: Promise and Performance.New Jersey: Chatham House Publishers. • Wirt, F. M. ve Kirst, M. W. (2009). The Political Dynamics of American Education. California: McCutchan. • National Education council decisions, development plans, Government Programs documents
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Relationship between education and politics
2	Relationship between education and politics
3	Educational Policy Studies
4	Policy planning and analysis
5	Concepts and strategies of educational policy studies
6	Contemporary debates in the field
7-8	MID-TERM EXAM
9	The economic dimensions of education
10	Education, economy and relationships education policy
11	Educational policies applied in the world
12	The results of the different education policies
13	Education policy research
14	Different methodological and theoretical approaches
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics			X
2	to comprehend basic features of scientific research process			X
3	to follow national and international issues at the field of Educational Research and Statistics.			X
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.		X	
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.			X
9	to analyze standart achievement tests in terms of the structural and functional way.		X	
10	to use advanced statistical methods to solve educational problems.			X
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.	X		
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.			X
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.		X	
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):

Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611901	COURSE NAME	Special Topics

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Laboratory	Credit	ECTS	TYPE	LANGUAGE
I	3	0	0	0	5	COMPULSORY (X) ELECTIVE ()	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Guidance and Psychological Counseling [if it contains considerable design, mark with (√)]	Social Science
	% 50		% 50

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	50
	Quiz		
	Homework		
	Project		
	Report		
	Others (presentation, summary of the presented discussion)		
FINAL EXAM		1	50

PREREQUISITE(S)	-
COURSE DESCRIPTION	Taking the lead for doctorate student, "The Specialization Field Course" ensures students to acquire knowledge, skills and attitude. The content of the course is as follows: defining a problem statemant and research topic related to the thesis, exposuring the purpose and importance of the study, process of guidance for choosing a suitable method for the implementation, developing a reference list and in addition to the aforementioned concerns, knowledge regarding the initial draft plan of the study.
COURSE OBJECTIVES	Evaluations and discussions of the new developments and articles in the study fields of the students who are progressing their Ph.D. thesis.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	-
COURSE OUTCOMES	By the end of this module students will be able to: 1. Choose a problem statemant and define it within the context of theoretical and / or social affects, 2. Understand the relationship between research topic and the research problem, 3. Understand and explain the importance and purpose of the study, 4. Choose one of the suitable methods devoted to the research problem and search the literature, 5. Develop an initial draft plan within the context of thesis proposal, devoted to estimated general situation of the study.
REFERENCES	Büyüköztürk,Ş.(2008). Sosyal bilimler için veri analizi el kitabı. Ankara: Pegem Akademi. Ekiz. D. (2003). Eğitimde araştırma yöntem ve metotlarına giriş. Ankara: Anı Yayıncılık. Karasar, N. (1996). Araştırmalarda rapor hazırlama yöntemi. Ankara: Pars Matbaacılık. Kuş, E. (2003). Nicel-nitel araştırma teknikleri. Ankara: Anı Yayıncılık. Marshall, C. ve Rossman G. (1989). Designing qualitive research. London: Sage Publications. Miles, M. B. ve Huberman, A. M. (1994). An expanded sourcebook qualitative data analysis. (Second Edition). California: Sage Publications, Inc. Yıldırım, A. ve Şimşek H.(2005). Sosyal bilimlerde nitel araştırma yöntemleri. Ankara: Seçkin Yayınları.
OTHER REFERENCES	
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Subject of the thesis research
2	Literature on the subject follow-up
3	Evaluation
4	Report preparation and presentation
5	Follow-up of the literature
6	Article review
7-8	MID-TERM EXAM
9	Source review
10	Evaluation
11	Follow-up of the literature
12	Article review
13	Evaluation
14	Report preparation and presentation
15-16	FINAL EXAM

No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.	X		
4	to realize problems at the field and to decide and plan about the issues of the field.	X		
5	to be aware of the ethical principles and reflect these principles practices in the field.	X		
6	to be aware of problems experienced in application process	X		
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.	X		
12	to have positive attitude towards life time learning.	X		
13	to use library, internet, scientific data bases effectively.	X		
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s): All Instructors
Signature: **Date**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611004	COURSE NAME	Item Response Theory

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Integrated Doctoral Degree [if it contains considerable design, mark with (√)]	Social Science
		X	

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	20
	Quiz		
	Homework	3	60
	Project		
	Report	1	20
	Others (……)		
FINAL EXAM		-	-

PREREQUISITE(S)	?
COURSE DESCRIPTION DERS BİLGİ FORMUNDAN ALINMIŞTIR.	This course will provide students with a solid grounding in the concepts and applications of item response theory, the skills to carry out Item Response Theory (IRT) analyses using specialized software, and in introduction to research in measurement. The course is designed for students with an interest in conducting measurement-related research, pursuing a career in the testing industry or higher education, or working in positions in which testing plays a major role. Topics will include binary and polytomous models, item and ability parameter estimation, model fit, and scaling and equating.
COURSE OBJECTIVES	1. Learners will become familiar with models of item response theory and understand mathematical underpinning of the models in item response theory. 2. Learners will know the fields of applications of diverse IRT models and be able to use computer programs to analyze empirical data. 3. Learners will be able to read and evaluate current literature of item response theory and its application.
CONTRIBUTIONS OF THIS COURSE TO APPLY PROFESSIONAL EDUCATION	By taking this course, students will be provided with an in-depth understanding of theoretical and practical issues surrounding item-response theory in assessment, its advantages and limitations, and its implications.
COURSE OUTCOMES	students are going to; 1. Explain when Rasch models are used and why 2 Understand 2- and 3-parameter item-response theory models and be able to estimate their parameters 3 Describe the practical and theoretical issues surrounding item-banking and Identification of Differential Item Functioning. Explain how computer-adaptive testing depends on item-response theory
TEXTBOOK.	Embretson, S. E. & Reise, S. P. (2000). Item response theory for psychologists. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
OTHER REFERENCES	Baker, F. B. (1992). Item response theory: Parameter estimation techniques. New York: Marcel Dekker. Hambleton, R.K. & Swaminathan, H. (1985). Item response theory: Principles and applications. Boston: Kluwer-Nijhoff.
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Course Introduction, Comparisons between IRT and CTT
2	Concepts and the Mathematical model , Assumptions of IRT
3	Models for Dichotomous data, Excel Demo
4	Item and Test Information, Evaluation of Unidimensionality, Excel Demo
5	Evaluation of Model-data fit, Software practice (BILOG)
6	Ability Scale, Estimation of ability
7	Item Calibration, Short Presentations of Polytomous IRT models
8	Test Score linking, Software Practice
9	Item and Test Bias, Differential Item Functioning (DIF) Software Practice
10	Test Construction, Computerized Adaptive Testing (CAT)
11	Application in Personality and Attitude Assessment
12	Management of school
13	Cognitive Assessment Models
14	Intro to Rule-Space Methodology, Software Practice
15-16	Presentations of the Final Project Final Exam Week

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.	X		
4	to realize problems at the field and to decide and plan about the issues of the field.			X
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process	X		
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.			X
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.	X		
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s): Prof. Dr. Mehmet Şişman
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Spring

COURSE CODE	543611005	COURSE NAME	Contemporary Studies in Psychometric Research

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY (X) ELECTIVE ( )	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science
	X		

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	30
	Quiz		
	Homework		
	Project	1	30
	Report		
	Others (……)		
FINAL EXAM		1	40

PREREQUIEITE(S)	
COURSE DESCRIPTION	This course provides an in-depth look at one or more research topics in psychometrics, or the statistical foundations of educational and psychological tests. Students will become familiar with current research, acquire specialized psychometric analysis skills, and learn how to conduct psychometric research in this course. The intent of the course is to provide students with considerable expertise in an area of measurement that is currently a focus of research. Topics covered may vary from term to term.
COURSE OBJECTIVES	By the end of the course students should be able to: 1. Understand the basic terms of educational and psychometric tests 2. Follow the new findings on the field. 3. Analyze statistical data on psychometric researches. 4. Perform a psychometric research.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	students are going to 1. Understand the basic terms of educational and psychometric tests 2. Follow the new findings on the field. 3. Analyze statistical data on psychometric researches. 4. Perform a psychometric research.
TEXTBOOK	• Erkuş, A. (2003). **Psikometri Üzerine Yazılar.** Türk Psikoloji Derneği Yayınları: Ankara. • Baykul, Y. (2000). **Eğitimde Ve Psikolojide Ölçme: Klasik Test Teorisi ve Uygulaması.** Ankara: ÖSYM. • Özçelik, D. A. (1992). **Test Hazırlama Kılavuzu.** Ankara: ÖSYM. • Tekin, H. (2008). **Eğitimde Ölçme ve Değerlendirme**. Ankara: Yargı. • Turgut, M. F. (1983). **Eğitimde Ölçme ve Değerlendirme Metodları**. Ankara: Saydam.
OTHER REFERENCES	
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Theoretical and conceptional foundations of educational administration
2	Basic principles of educational management; Classical organization theory and educational management; Neo-classical organizational theory and educational management; Current organizational theory and educational management;
3	Management processes
4	Theory and practice in educational management
5	Developing educational administration as a human science in the world and Turkey
6	Training and attainment of educational administrators and school principals in the in the world and Turkey
7-8	MID-TERM EXAM
9	School administration and school management process
10	Management of human resources
11	Management of students' services in the school.
12	Management of education and training practices in the school.
13	Management of school
14	Solutions to the problems of education and school management
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process		X	
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.		X	
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.	X		
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s): Prof. Dr. Mehmet Şişman
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611006	COURSE NAME	Applied Statistics

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	40
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	-
COURSE DESCRIPTION	This course includes the following topics: introduction to statistics, describing exploring and comparing data, multiple comparison, probability, probability distributions, normal probability distributions, estimates and sample sizes, hypothesis testing, inferences from two samples, correlation and regression, multiple correlation, non-parametric statistics, multinomial experiments and contingency tables, analysis of variance and covariance.
COURSE OBJECTIVES	This course serves two purposes. The first purpose of this course is to provide a background in application of statistical techniques to research in education and statistical principles in order to be a good user of statistical analysis. These will be learned how to describe data effectively, how to run a simple regression, and how to interpret the results. The second purpose of this course is to provide the basic knowledge in probability theories, such as expected values or probability distributions, which are necessary in understanding other courses in Master and PhD classes. The lab activities are an essential part of the course.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	-
COURSE OUTCOMES	At the end of this course, students will be able to: 1. Describe the goals of various statistical methodologies conceptually. 2. Apply statistical techniques in the context of everyday life and further studies in their discipline. 3. Understand different sampling strategies. 4. Use descriptive statistics and graphical methods to summarize data accurately. 5. Use inferential statistics to make valid judgments based on the data available. 6. Select the appropriate course tools to analyze a particular problem. 7. . Develop a healthy skepticism toward statistical studies and their results based on sensible consideration of the techniques employed.
TEXTBOOK	Fan, X., Felsovalyi, A., Sivo, S., & Keenan, S. (2001). SAS for Monte Carlo Studies : A Guide for Quantitative Researchers. Thousand Oaks, CA : SAGE. Cox, D. R. & Snell, E. J. Applied Statistics - Principles and Examples (Chapman & Hall/CRC Texts in Statistical Science) Cox, D.R. & Donnelly, A. C. Principles of Applied Statistics
OTHER REFERENCES	-
TOOLS AND EQUIPMENTS REQUIRED	Textbooks, articles.

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Descriptive Statistics I
2	Descriptive Statistics II
3	Frequencies
4	Multivariate Data
5	Cross Tabulation I, Cross Tabulation II
6	Correlation
7-8	MID-TERM EXAM
9	Linear Regression I, Linear Regression II
10	Student's t-Tests I, Student's t-Tests II
11	One-Way ANOVA
12	Repeated Measures
13	Factor Analysis
14	SPSS
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process			X
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.	X		
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process	X		
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.	X		
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.			X
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.		X	
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611007	COURSE NAME	Classroom Assessment

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	0	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Integrated Doctoral Degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	30
	Quiz		
	Homework	1	30
	Project		
	Report		
	Others (.....)		
FINAL EXAM		1	40

PREREQUIEITE(S)	
COURSE DESCRIPTION	In this course, measurement and evaluation in education, the basic concepts of measurement and evaluation, measurement tools, assessment types, assessment and evaluation techniques used, alternative approaches to evaluation, assessment and evaluation practices are explained.
COURSE OBJECTIVES	The aim of this course the students to recognize the location of measurement and evaluation in education, understanding the basic concepts of measurement and evaluation, to recognize the properties of measurement tools, to recognize types of assessment, measurement and evaluation techniques used to know, to recognize alternative approaches to evaluation, measurement and evaluation techniques to provide applications.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	1. Knows the basic concepts of measurement and evaluation. 2. Understand the properties of measurement tools. 3. Recognizes the types of evaluation. 4. Knows the measurement and the techniques used in the evaluation. 5. Recognizes the alternative approaches to evaluation. 6. Perform the techniques of measurement and evaluation.
TEXTBOOK	Popham, W. J. (2008). Classroom assessment. Boston: Allyn and Bacon. Baykul, Y. ve Turgut, M. F. (2012). Eğitimde ölçme ve değerlendirme. Ankara:Pegem Akademi.
OTHER REFERENCES	Baykul, Y. (2010). Eğitimde ve psikolojide ölçme. Ankara: Pegem Akademi. Özçelik, D. A. (2010). Okullarda ölçme ve değerlendirme el kitabı. Ankara:Pegem Akademi. Musial, D. (2009). Foundations of meaningful educational assessment. Boston: McGraw-Hill Higher Education.
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Measurement and evaluation in education
2	Basic concepts of measurement and evaluation
3	Characteristics of measuring instruments
4	Characteristics of measuring instruments
5	Types of evaluation
6	Types of evaluation
7-8	MID-TERM EXAM
9	Techniques used in measurement and evaluation
10	Techniques used in measurement and evaluation
11	Alternative approaches to evaluation
12	Alternative approaches to evaluation
13	Assessment and evaluation practices in the classroom
14	Assessment and evaluation practices in the classroom
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics			X
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.	X		
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.	X		
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.			X
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.			X
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.	X		
14	to learn which research method and statistical technic is suitable for a condition.		X	
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGU Department of Educational Science
Course Information Form

SEMESTER	Spring

COURSE CODE	543612001	COURSE NAME	Education Statistics III: Correlation and Regression

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
II	3	0	0	3	10	COMPULSORY (X) ELECTIVE ()	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Mechanical Engineering Profession [if it contains considerable design, mark with (√)]	Social Science
%75	%25		

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	1st Mid-Term		
	2nd Mid-Term		
	Quiz		
	Homework	1	40
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	None
COURSE DESCRIPTION	The focus of the course is primarily provides an in-depth exploration of multiple regression and correlation, plus exposure to the fundamentals of exploratory factor analysis, multivariate analysis of variance, and discriminant function analysis. The intent of the course is to provide students with considerable expertise in an area of correlation and regression analysis.
COURSE OBJECTIVES	The main purpose of this course to help students to be able understand the basics of regression and correlation. Theoretical knowledge on the subject will be acquired.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	By the end of this course students should be able to; -investigate the strength and direction of a relationship between two variables by collecting measurements and using suitable statistical analysis, -evaluate and interpret the product moment correlation coefficient and Spearman's correlation coefficient, -find the equations of regression lines and use them where appropriate.
TEXTBOOK	-- Tatlıdil, H. (1992). Uygulamalı Çok Değişkenli İstatistiksel Analiz. Ankara. - Arıcı, H. (2005). İstatistiksel Yöntemler. Meteksan, Ankara.
OTHER REFERENCES	- Baykul, Y. (1997). İstatistik, Metodlar ve Uygulamalar. Anı Yayıncılık, Ankara. -Büyüköztürk, Ş. (2007). Sosyal Bilimler İçin Veri Analizi El Kitabı. 8. Baskı, Pegem A Yayınları, Ankara. - Hovardaoğlu, S. (1994). Davranış Bilimleri İçin İstatistik. Hatipoğlu Yayınları, Ankara. -Karasar, N. (2000). Bilimsel Araştırma Yöntemi: Kavramlar, İlkeler, Teknikler. 10. Baskı, Nobel Yayınları, Ankara. - Özdamar, K. (1999). Paket Programlar ile İstatistiksel Veri Analizi. Kaan Kitabevi, Eskişehir. - Siegel, S. (1977). Davranış Bilimleri İçin Parametrik Olmayan İstatistikler. Çeviren: Yurdal Topsever, A.Ü. Dil ve Tarih Coğrafya Fakültesi Yayınları, Ankara.
TOOLS AND EQUIPMENTS REQUIRED	Computer

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Correlation and regression
2	Scatterplots
3	Linear regression formula
4	The regression line and direction of the relationship
5	Pearson's r correlation coefficient
6	Regression statistics
7	MID-TERM
8	The importance of observing a scatterplot
9	The hypothesis test for correlation and regression
10	Test preparation
11	Features of the hypothesis test
12	Four aspects of a relationship for correlation and regression analysis
13	Proper interpretation of findings
14	FINAL

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics			X
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.	X		
4	to realize problems at the field and to decide and plan about the issues of the field.	X		
5	to be aware of the ethical principles and reflect these principles practices in the field.	X		
6	to be aware of problems experienced in application process	X		
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.	X		
12	to have positive attitude towards life time learning.			X
13	to use library, internet, scientific data bases effectively.	X		
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543612002	COURSE NAME	Tests and Measurements

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0		3	10	COMPULSORY (X) ELECTIVE ( )	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science
	X		

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	30
	Quiz		
	Homework		
	Project	1	30
	Report		
	Others (……)		
FINAL EXAM		1	40

PREREQUIEITE(S)	
COURSE DESCRIPTION	This course provides nntroduction to testing, measurement, and evaluation related to instructional problems, the construction and use of teacher-made tests, a survey of standardized tests, test interpretation, and basic statistical procedures. The first half of the course focuses on: history of measurement, basic concepts, important social and ethical issues in testing, and technical/statistical concepts in measurement. The second half of the course deals with the content, administration, scoring and interpretation of tests frequently used in the field. This course provides students will be better able to identify and gather essential information, interpret test information, and use test results to assist in needed.
COURSE OBJECTIVES	By the end of the course students should be able to: 1. understand the basic terms of measurement and evaluation 2. understand the basic terms of psychometric instruments and their developments 3. Classify the psychometric tests 4. Develop a psychometric test 5. Administer the popular psychometric tests in the field 6. Score the popular psychometric tests in the field
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	students are going to 1. understand the basic terms of measurement and evaluation 2. understand the basic terms of psychometric instruments and their developments 3. Classify the psychometric tests 4. Develop a psychometric test 5. Administer the popular psychometric tests in the field 6. Score the popular psychometric tests in the field
TEXTBOOK	• Erkuş, A. (2003). **Psikometri Üzerine Yazılar.** Türk Psikoloji Derneği Yayınları: Ankara. • Baykul, Y. (2000). **Eğitimde Ve Psikolojide Ölçme: Klasik Test Teorisi ve Uygulaması.** Ankara: ÖSYM. • Özçelik, D. A. (1992). **Test Hazırlama Kılavuzu.** Ankara: ÖSYM. • Tekin, H. (2008). **Eğitimde Ölçme ve Değerlendirme**. Ankara: Yargı. • Turgut, M. F. (1983). **Eğitimde Ölçme ve Değerlendirme Metodları**. Ankara: Saydam.

OTHER REFERENCES	
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Theoretical and conceptional foundations of educational administration
2	Basic principles of educational management; Classical organization theory and educational management; Neo-classical organizational theory and educational management; Current organizational theory and educational management;
3	Management processes
4	Theory and practice in educational management
5	Developing educational administration as a human science in the world and Turkey
6	Training and attainment of educational administrators and school principals in the in the world and Turkey
7-8	MID-TERM EXAM
9	School administration and school management process
10	Management of human resources
11	Management of students' services in the school.
12	Management of education and training practices in the school.
13	Management of school
14	Solutions to the problems of education and school management
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process		X	
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.		X	
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.		X	
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.	X		
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s): Prof. Dr. Mehmet Şişman
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Spring

COURSE CODE	543612701	COURSE NAME	Doctoral Thesis

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
II	0	1	0	0	25	COMPULSORY (X) ELECTIVE ()	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Guidance and Psychological Counseling [if it contains considerable design, mark with (√)]	Social Science
	%75		%25

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	1st Mid-Term	1	40
	2nd Mid-Term		
	Quiz		
	Homework	1	60
	Project		
	Report		
	Others (……)		
FINAL EXAM			

PREREQUIEITE(S)	
COURSE DESCRIPTION	The content of this lesson is to educate students about the subjects such as determining thesis subject, dissertation research and writing process. In this lesson advisor gives the information about the doctoral dissertation process. Detailed content of each is determined by the academic advisor.
COURSE OBJECTIVES	It is a process in which students study his/her thesis under the advisor's management. It is aimed to teach how the scientific research should be and
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	At the end of this lesson students will be able to; -gain an advanced knowledge about their thesis, -conduct their dissertation study, -review and evaluate literature.
TEXTBOOK	-
OTHER REFERENCES	-
TOOLS AND EQUIPMENTS REQUIRED	Computer

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Literature review
2	Literature review
3	Literature review
4	Advanced knowledge about thesis
5	Advanced knowledge about thesis
6	Advanced knowledge about thesis
7	The last literature review
8	The last literature review
9	The last literature review
10	Discussion
11	Discussion
12	Determining problem situation
13	Writing thesis
14	The last correction

No	Program Outcomes	3	2	1
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process		X	
3	to follow national and international issues at the field of Educational Research and Statistics.	X		
4	to realize problems at the field and to decide and plan about the issues of the field.	X		
5	to be aware of the ethical principles and reflect these principles practices in the field.	X		
6	to be aware of problems experienced in application process	X		
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.	X		
12	to have positive attitude towards life time learning.	X		
13	to use library, internet, scientific data bases effectively.	X		
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s): All instructor
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Spring

COURSE CODE	543612003	COURSE NAME	Meta Analysis

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
FALL	3	0	0	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Doctoral program	Social Science
	%75		%25

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	1st Mid-Term	1	40
	2nd Mid-Term		
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	None
COURSE DESCRIPTION	In this course the logic of meta-analysis and the way that it is being used in many fields, including medicine, education, social science, business, and others are going to be discussed. Students will learn how to conduct a meta-analysis (how to compute an effect size, compute summary effects, assess heterogeneity of effects, test for differences in effect size across subgroups, and more). Various controversies in meta-analysis will be discussed in this course. At the end of the course, all students should feel comfortable conducting a meta-analysis from start to finish using this or other software.
COURSE OBJECTIVES	It is aimed to provide students with the knowledge, skills, and abilities necessary to conduct basic research reviews, research syntheses, and meta-analyses in this course. It is aimed students to gain understanding about the increasing importance of, applications and uses of, and recognition of meta - analysis for formulating and enacting evidence - based policies and practices. Students are expected to compute a variety of effect sizes for use in meta -analysis, compute variances, standard errors and confidence intervals for use in a meta-analysis and gain understanding of their influence on summary statistics typically reported in a meta -analysis , convert different types of effect sizes, identify and quantify heterogeneity in the context of a meta - analysis, test for differences in effect size across subgroups, and more.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	At the end of this lesson students will be able to; 1-gain understanding about the ncreasing importance of, applications and uses of, and recognition of meta - analysis for formulating and enacting evidence - based policies and practices. 2-plan and execute a basic meta - analysis. 3-compute variances, standard errors, and confidence intervals for use in a meta-analysis and gain understanding of their influence on summary statistics typically reported in a meta-analysis. 4-learn how to compute an effect size, compute summary effects, assess heterogeneity of effects, test for differences in effect size across subgroups 5-gain ability to conduct meta-analysis from beginning to the end through hands on experiences or by using computer programs.
TEXTBOOK	1.Bornenstein, M., Hedges, L. V., Higgins, J. P. T. ve Rothstein, H. R.

	(2009). *Introduction to meta-analysis*. West Sussex, UK: Wiley. 2.Cooper, H., Hedges, L. V. ve Valentine, J. C. (2009).*The handbook of research synthesis and meta-analysis.* New York, NY: Russell Sage Foundation.
OTHER REFERENCES	3.Banda, D. R. ve Therrien, W. J. (2008). A teacher's guide to meta-analysis. *Teaching Exceptional Children*, 41, 66-71. 4.Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement.* Routledge. 5.Lipsey, W. M. (2000). *Practical meta-analysis*. New York: Sage. 6.Cooper, M. H. (2009). Research synthesis and meta-analysis: A step-by-step approach. New York: Sage.
TOOLS AND EQUIPMENTS REQUIRED	Computer

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Introduction to the lesson
2	What is meta –analysis?
3	General characteristics of meta-analysis
4	General characteristics of meta-analysis
5	What is the difference between meta-analysis and collected work?
6	Application areas of meta-analysis
7-8	MID-TERM EXAM
9	Steps of meta-analysis
10	Methods of meta-analysis
11	Methods of meta-analysis
12	The comparison of meta -analysis methods
13	Student works on meta-analysis
14	Examination and evaluation of these works
15	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.			X
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.		X	
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Spring

COURSE CODE	543612004	COURSE NAME	Structural Equation Modeling

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	0	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science
%50	%25		%25

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	40
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	
COURSE DESCRIPTION	In this course, correlation and multiple regression, causal models, model specification and identification, data entry and organization of data, covariance structure, observed and latent variables, confirmatory factor analysis, path analysis, path diagrams, parameter and model estimation, SEM models, fit indices, SEM applications, computer applications (LISREL, AMOS), interpretation of results, reporting of SEM research issues, will be discussed.
COURSE OBJECTIVES	The goal of the course is to gain familiarity and build expertise in the use of latent variable models within a structural equation modeling framework. The course includes the use and interpretation of AMOS and LISREL software. Emphasis in the course is on the mastery of concepts and principles, development of skills in the use and interpretation of SEM software, and in the development of critical analysis skills in understanding research using the covered techniques.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	By the end of the course, students are expected to: 1. Understand the types of hypotheses and research questions for which structural equation modeling is used 2. Understand the assumptions of SEM 3. Have in-depth knowledge about the most common SEM techniques (e.g., path analysis, confirmatory factor analysis, structural equation models, multiple-group modelling) 4. Know and perform structural equation modeling techniques using software 5. Understand how structural equation models fit into a larger framework of statistical methods
TEXTBOOK	• Şimşek, Ö. F. (2007). Yapısal eşitlik modellemesine giriş: Temel ilkeler ve LISREL uygulamaları. Ankara: Ekinoks • Yılmaz, V. & Çelik, H. E. (2009)Lisrel ile yapısal eşitlik modellemesi-I. Ankara: Pegem • Hoyle, R.H. (1995). Structural equation modeling. Thousand Oaks, CA: Sage.
OTHER REFERENCES	• Byrne, B. M. (2009). Structural equation modeling with AMOS: Basic concepts, applications, and programming (2nd Ed.). New York, NY: Routledge Academic. • Jöreskog, K. G., & Sörbom, D. (1989). LISREL 8 user's reference guide. Chicago: Scientific Software International, Inc.

	• Raykov, T., & Marcoulides, G. A. (2006). A first course in structural equation modeling (2nd Ed.). Mahwah, NJ: Erlbaum Associates. • Schumacker, R. E., & Lomax, R.G. (2010). A beginner's guide to structural equation modeling (3rd Ed.). Mahwah, NJ: Erlbaum Associates.
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Introduction; Review of Regression and Correlation.
2	Introduction to covariance structure and multivariate normal distribution
3	Introduction to Maximum Likelihood and Missing Data
4	Observed and latent variables, path analysis,
5	Confirmatory Factor Analysis: Concepts/Identification
6	Confirmatory Factor Analysis: Fit Assessment
7-8	MID-TERM EXAM
9	Multiple Group Factor Analysis
10	Introduction to Structural Equation Modeling: Structural Models
11	Introduction to Structural Equation Modeling: Path Analysis with Latent Variables
12	Invariance Testing
13	Full Models and Other Applications
14	SEM with Non-Normal Data
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	Program Outcomes	3	2	1
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			
	1: None. 2: Partially. 3: Completely.			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Spring

COURSE CODE	543612005	COURSE NAME	Education Statistics IV: Multivariate Statistics

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	0	3	10	COMPULSORY ( ) ELECTIVE (x)	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	40
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	
COURSE DESCRIPTION	Introduction to commonly used multivariate statistical analyses, multiple regression, ANOVA, logistic regression, survival analysis, and MANOVA, canonical correlation, principal components analysis, exploratory factor analysis, Confirmatory Factor Analysis, discriminant function analysis, logistic regression, and cluster analysis.
COURSE OBJECTIVES	By the end of the course students should be able to: 1. understand factorial research design 2. understand the theories related to the normal distribution 3. understand how to do data screening and test assumptions 4. understand how to apply multiple regression 5. understand differences between anova/ancova and manova/mancova
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	students are going to 1. understand factorial research design 2. understand the theories related to the normal distribution 3. understand how to do data screening and test assumptions 4. understand how to apply multiple regression 5. understand differences between anova/ancova and manova/mancova
TEXTBOOK	• Şişman, M. & Turan, S. (2001). Okul Yöneticileri İçin Standartlar: Eğitim Yöneticilerinin Bilgi Temelleri Üzerine Düşünceler, **B. Ü. Sosyal Bilimler Enstitüsü Dergisi,** 3(4), 68-87. • Şişman, M. & Turan, S. (2004). Dünyada ve Türkiye'de Eğitim Yöneticilerinin Yetiştirilmesi, **Türk Eğitim Bilimleri Dergisi**, C. 2, s.1.
OTHER REFERENCES	• Bursalıoğlu, Z. (1991). **Eğitim Yönetiminde Teori ve Uygulama**. Ankara: Pegema • Bursalıoğlu, Z. (1999). **Okul Yönetiminde Yeni Yapı ve Davranış**. Ankara: Pegema. • Özden, Y. (Editör) (2004). **Eğitim ve Okul Yöneticiliği El Kitabı**. Ankara: Pegema. • Şişman, M. & Turan, S. (2005). **Eğitim ve Okul Yönetimi.** A. Yesevi Üniversitesi Ders Notları • Şişman, M. (1994). **Örgüt Kültürü,** Eskişehir: A. Ü. Yayınları • Şişman, M. (2002). **Örgütler ve Kültürler,** Ankara: Pegema. • Şişman, M. (2009). **Türk Eğitim Sistemi ve Okul Yönetimi**. Ankara: Pegema.

	• Taymaz, H. (2001) **Okul Yönetimi.** Ankara: Pegema • Turan, S. (Editör) (2010). **Eğitim Yönetimi: Teori, Araştırma ve Uygulama**. Ankara: Nobel Yayıncılık.
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Introduction, course overview, stats review, Fundamentals of Research designs
2	Data Screening, Data Screening Using SPSS
3	Multiple Regression and SPSS Application-Outlier
4	Logistic Regression & Canonical correlation,
5	Correlation and Regression Review and SPSS Application
6	Multiple Regression and SPSS Application-Outlier
7-8	Mid-term exam
9	Principal Component Analysis and Factor analysis
10	Principal Component Analysis and Factor analysis and SPSS Applications
11	Confirmatory Factor Analysis and Lisrel Applications
12	ANOVA/ANCOVA and ANOVA SPSS Applications
13	Manova/Mancova and Manova SPSS applications
14	Survival analysis and SPSS Application
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process		X	
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Spring

COURSE CODE	543612006	COURSE NAME	Program Evaluation Design

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	0	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Integrated Doctoral Degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	30
	Quiz		
	Homework	1	30
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	40

PREREQUIEITE(S)	
COURSE DESCRIPTION	Program evaluation, the need for program evaluation, program evaluation process, program evaluation models, research methods used in program evaluation, types of data used in program evaluation, data gathering tools used in researches, reliability and validity studies of the data gathering tools in researches, the analysis and interpretation of the data obtained in researches, reporting the findings of the research, program evaluation studies carried out in turkey and in the world.
COURSE OBJECTIVES	The purpose of this course is provide to students know the basic concepts of program evaluation, aware of the need for the program evaluation, program evaluation models, program evaluation research to analyze, make a program evaluation research, program evaluation studies carried out in Turkey and worldwide reviews and assessments.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	1. Knows the basic concepts of program evaluation. 2. Recognizes the need for the program evaluation. 3. Knows models of program evaluation. 4. Analyzes the program evaluating research. 5. Conduct research to evaluate the program. 6. interprets the results of the researches and prepares a report. 7. Examines program evaluation studies carried out in Turkey and around the world.
TEXTBOOK	Fitzpatrick, J. L; Sanders, J. S. ve Worthen, B. R. (2004). Program evaluation. Boston: Pearson Education Inc.
OTHER REFERENCES	Demirel, Özcan. (2003). **Kuramdan Uygulamaya Eğitimde Program Geliştirme.** Ankara: Pegem Yayıncılık. Ertürk, Selahattin. **(**1972). **Eğitimde Program Geliştirme.** Ankara:Hacettepe Üniversitesi Basımevi. Gözütok, Dilek. (1999). Program Değerlendirme. **CumhuriyetDöneminde Eğitim II**. Ankara: Milli Eğitim Bakanlığı Basımevi, ss. 160-174.. Şahin, İsmet. (2008). Yeni İlköğretim Birinci Kademe Fen ve Teknoloji Programının Değerlendirilmesi. **Milli Eğitim.** 177, ss. 181-206. Turgut, Fuat. (1983). Program Değerlendirme. **Cumhuriyet Döneminde Eğitim I.** İstanbul: Milli Eğitim Basımevi, ss. 215-231.
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Basic concepts related to program evaluation
2	The need for program evaluation
3	Program evaluation models
4	Program evaluation models
5	Program evaluation models
6	Program evaluation models
7-8	MID-TERM EXAM
9	The program evaluation process
10	Research methods used in program evaluation
11	The program used to evaluate the data collection tools and data types
12	Analysis and interpretation of program evaluation research results
13	Program evaluation studies in Turkey
14	Program evaluation studies in the world
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics			X
2	to comprehend basic features of scientific research process		X	
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.			X
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process			X
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.			X
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.			X
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.		X	
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.		X	
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.		X	
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Spring

COURSE CODE	543612007	COURSE NAME	Survey Design and Instrument Construction

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	40
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	
COURSE DESCRIPTION	Basic concepts of instrument construction. Scale development stages. Item writing. Pilot application. Validity and reliability of the analysis. Using SPSS program. Making exploratory factor analysis. Making first-level confirmatory factor analysis. Make second-level confirmatory factor analysis. The correct interpretation of the analysis results. Reporting. Quantitative research designs. Experimental patterns. Quasi-experimental designs. Single-subject designs. Scanning model. Correlational research.
COURSE OBJECTIVES	By the end of the course students should be able to: 1- Explain the basic concepts of scale to develop. 2- Explain the concept of scale development. 3- Explain scale development stages. 4- Definitions the research patterns. 5- Selects appropriate research design about research problem. 6- Compares types of research design with each other. 7- Develops appropriate measuring tool about research design. 8- Sampling research design. 9- Follow the scale development process phases, respectively 10- Reveals measurement techniques in accordance with the factor structure of vehicle.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	Students are going to 1- Explain the basic concepts of scale to develop. 2- Explain the concept of scale development. 3- Explain scale development stages. 4- Definitions the research patterns. 5- Selects appropriate research design about research problem. 6- Compares types of research design with each other. 7- Develops appropriate measuring tool about research design. 8- Sampling research design. 9- Follow the scale development process phases, respectively 10- Reveals measurement techniques in accordance with the factor structure of vehicle.
TEXTBOOK	• Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö.E., Karadeniz, Ş. & Demirel, F. (2008). Bilimsel araştırma yöntemleri. Ankara: PegemA Yayınları. • Baş, T. (2008). Anket, Nasıl Yapılır, Uygulanır, Değerlendirilir? Ankara:

	Seçkin Yayınevi • Turgut, M. F. ve Baykul, Y. (1992). Ölçekleme Teknikleri, ÖSYM Yayınları, Ankara • Togerson, W.S. (1958). Theory and Methods of Scaling, New York: Wiley.
OTHER REFERENCES	• Tezbaşaran, A. (1997). Likert tipi ölçek geliştirme kılavuzu. Ankara: Türk Psikologlar Derne i Yayınları. • Hackman, J. R. ve Oldham, G. R. Work Redesign, Reading, MA: Addison-Wesley, 1980. • Şencan, H. Sosyal ve Davranışsal Ölçümlerde Güvenilirlik ve Geçerlilik, Seçkin Yayınları, Ankara, 2005
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Basic research design concepts.
2	Types and purposes of quantitative research designs
3	Experimental and quasi-experimental research design.
4	Descriptive research design
5	Comparative and correlational research design
6	Scan and causal comparative research models.
7-8	MID-TERM EXAM
9	Measuring the scale of the basic concepts and research issues.
10	Scale development stages.
11	Preliminary statistical analysis was developed to scale trials.
12	The creation of the final version of the scale.
13	Selection of the sample selection and statistical techniques appropriate for the scale required.
14	Reporting of the research design was prepared in accordance with the scale.
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.		X	
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.		X	
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.	X		
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611008	COURSE NAME	Qualitative Analysis: Advanced

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY (X) ELECTIVE ( )	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Science Education [if it contains considerable design, mark with (√)]	Social Science
	%80		%20

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	30
	Quiz		
	Homework		
	Project	1	30
	Report		
	Others (……)		
FINAL EXAM		1	40

PREREQUIEITE(S)	-
COURSE DESCRIPTION	While recognizing numerous methodological approaches within qualitative research, this course provides an in-depth exploration of conceptually different methods (grounded theory, narrative, participatory action, and ethnography), with an emphasis on the application and critique of these methods. In addition, the course introduces the student to use of computer software for managing the data, analysis, and presentation of qualitative findings.
COURSE OBJECTIVES	The main purpose of this course to help students to be able to plan, design, execute, report in education. Theoretical knowledge on various research methods will be acquired, from conceptualization to operationalization carrying out research will be executed. Students will understand, explain, predict, develop proposal, implement those proposals, interpret and report research results.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	At the end of the course, the students should be able to: 1. Understand numerous methodological approaches, 2. Have a cognitive frame on qualitative analysis, 3. Comprehent the methods of qualitative analysis, 4. Interpret qualitative data analysis, 5. Use qualitative research methods in education effectively, 6. Plan, design, interpret and report an independent qualitative research
TEXTBOOK	1. Balcı, A. (2000). *Sosyal bilimlerde araştırma.* Ankara: Pegema Yayıncılık. 2. Miles, M. B. & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis*. London: Sage. 3. Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3.Baskı). Sage Publications, Thousand Oaks. 4. Yıldırım, A. & Şimşek, H. (1994). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık. 5. Neuman, W. L. (2000). *Social research methods, qualitative and quantitative approaches*. Boston: Allyn and Bacon. 6. Strauss, A. & Corbin, J. (1998). *Basics of qualitative research*. London: Sage Publications. 7. Makaleler (Öğretim üyesince sağlanacaktır).
OTHER REFERENCES	1. Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
TOOLS AND EQUIPMENTS REQUIRED	-

COURSE SYLLABUS	
WEEK	**TOPICS**
1	**I Introduction** Emergence-first research studies Basic concepts Philosophical foundations Basic characteristics
2	What kind of research topics and what kind of areas What kind of results are obtained Qualitative or Quantitative
3	**II Types** Fenomenology Etnography Grounded theory Case study Field research
4	Action research Biography Narratives Hermeneutical Group focused studies (type of analysis)
5	**III Sampling and types** *(Purposive-Judgement sampling, Convenience sampling, quota sampling, theoretical sampling, snowball sampling)*
6	**IV Analysis** **A. Types of analysis** Typology, John Lofland & Lyn Lofland Taxonomy ve Domain Analysis James Spradley Constant Comparison/Grounded Theory Anselm Strauss Analytic Induction F. Znaniecki, Howard Becker, Jack Katz.
7-8	MID -TERM
9	Logical Analysis/Matrix Analysis Matthew Miles ve Huberman Quasi-statistics Howard Becker Event Analysis/Microanalysis, Frederick Erickson, Kurt Lewin, Edward Hall, Erving Goffman Metaphorical Analysis Michael Patton, Nick Smith Hermeneutical Analysis Max Van Manen
10	Phenomenology/Heuristic Analysis Clark Moustakas Discourse analysis James Gee Narrative Analysis Catherine Reisman Semiotics Peter Manning Content Analysis R. P. Weber
11	**B. Types and characteristics of interview** i. Tightly structured ii. Structured iii. Loosely structured **C. Observation** (Participant Observation, Nonparticipant Observation) **Observation records** **D. Document analysis and artifact analysis**
12	**V Coding of data** **A. Data sources and characteristics** **B. Analsis** i. Data recording and transcription (video, audio, paper-pencil) Coding types (Levels, processes, titles, perceptions, open areas) **Categories and the formation process of themes and cautions (**Open Coding, Axial Coding, Selective Coding) **C.Qualitative analysis types according to analysis**
13	**VI Validity, Reliability, Generalizability,** Triangulation: - Member Checking: - Outlier Analysis: - Pattern Matching: - Representativeness Check: - Coding Check multiple coders: - Prolonged engagement

	- Persistent observation - Referential adequacy - Peer debriefing - Reflexive journal - Thick description - Purposive sampling Audit trail. (Lincoln and Guba, Erlandson et al. 1993)
14	**VII Reporting**
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics			X
2	to comprehend basic features of scientific research process		X	
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.			X
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.			X
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.			X
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611009	COURSE NAME	Computer Assisted Qualitative Data Analysis

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
FALL	3	0	-	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Mechanical Engineering Profession [if it contains considerable design, mark with (√)]	Social Science
	%75		%25

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	1st Mid-Term	1	40
	2nd Mid-Term		
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	None
COURSE DESCRIPTION	This course provides advanced treatment of important theoretical and methodological topics in the contemporary qualitative literature and in the ongoing development of qualitative methodology. Students will learn how to code large amount of qualitative data in a systematic way through computer programs. Therefore; they always review existing texts and recall the stored information. Topics include coding, recalling and interrelating of data. The intent of this course is to provide students with considerable expertise in using computer in qualitative analysis.
COURSE OBJECTIVES	The aim of this lesson is to gain students expertise on using computers in the qualitative analysis. This course provides the opportunity to students to analyze, code and recall the large amount of data easily through the computer programs related to qualitative analysis. At the end of this lesson it is aimed students to learn techniques of qualitative reach and making practice through the computer programs.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	At the end of this lesson students will be able to; - gain understanding about theoretical and methodological topics in the contemporary qualitative literature. - code large amount of qualitative data in a systematic way. - review existing texts and reach the stored information easily. -gain expertise on using computer programs. -code, recall and relate the qualitative data. -learn the techniques of qualitative research and make practice through the computer programs.
TEXTBOOK	1. Yıldırım, A. ve Şimşek, H. (2008). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin. 2. Baş, T. ve Akturan, U. (2008). Nitel araştırma yöntemleri NVivo 7.0 ile nitel veri analizi. Ankara: Seçkin.
OTHER REFERENCES	3. Kuş, E. (2009). *NVivo 8 ile nitel araştırma projeleri* . Ankara: Anı. 4. Kuş, E. (2006). *Sosyal bilimlerde bilgisayar destekli nitel veri analizi: Örnek program NVivo2 ile gösterimler.* Ankara: Anı. 5. Bazeley, P. ve Richards, L. (2000). *The NVivo qualitative project book.* Sage. 6. Richards, L. (1999). *Using NVivo in qualitative research*. London: Sage. 7. Yıldırım, K. (2010). Nitel araştırmalarda niteliği arttırma. *Elementary Education Online*, 9(1), 79-92.

TOOLS AND EQUIPMENTS REQUIRED	Computer

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Introduction to the lesson
2	General characteristics of qualitative research
3	General characteristics of qualitative research
4	Ethic aspects of qualitative research
5	Data collection methods in qualitative research
6	Data collection methods in qualitative research
7-8	MID-TERM EXAM
9	Qualitative research designs
10	Qualitative data analysis
11	Coding the qualitative data through the computer programs
12	Recalling the data through the computer programs
13	Analysis of the data through thecomputer programs
14	Relating data through the computer programs
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics		X	
2	to comprehend basic features of scientific research process		X	
3	to follow national and international issues at the field of Educational Research and Statistics.		X	
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.			X
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.			X
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.			X
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611010	COURSE NAME	Seminar in Educational Research

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	0	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term		
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM			

PREREQUIEITE(S)	
COURSE DESCRIPTION	In this course; the role of research in education and society, procedures in the selection and evaluation of research projects, and techniques of data analysis will be examined.
COURSE OBJECTIVES	The purpose of this course is to provide an overview of research procedures, forms of evaluation, and various types of techniques used for research data collection. The foundation and framework for the conceptualization of a thesis or thesis project will be the main focus of assignments, discussions, and overall coursework.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	In this course these objectives are expected to be done; • Provide an opportunity to learn about educational research methods; • Read the professional literature in an area of interest to help define a current professional perspective; • Develop a problem statement that is researchable based on current professional practice and literature; • Formulate testable hypotheses and/or research questions that target the problem statement; • Generate a list of references showing the sources and methods used in the literature search; • Review and analyze professional literature that is relevant to the problem statement; • Develop a research design that is appropriate for a thesis/thesis project; • Become familiar and proficient with utilizing American Psychological Association (APA) style formatting.
TEXTBOOK	Ekşi, H. (ed.). (2009). *Amerikan Psikoloji Derneği Yayım Kılavuzu.* Kaknüs Yayınları: İstanbul.
OTHER REFERENCES	Miles, M. B. & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook.* Sage Publication: USA. Ocak, M. A. (2010). *Alanyazın İncelemesi.* Nobel Yayıncılık: İstanbul. Büyüköztürk, Ş., Akgün, Ö. E., Karadeniz, Ş., Demirel, F, & Kılıç, E. (2010). *Bilimsel Araştırma Yöntemleri.* Pegem Akademi Yayıncılık: Ankara. Yıldırım, A. & Şimşek, H. (2011). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri.* Seçkin Yayıncılık: Ankara.
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Educational research methods
2	Read the professional literature in an area of interest
3	Develop a problem statement that is researchable based on current professional practice and literature
4	Formulate testable hypotheses and/or research questions that target the problem statement
5	Generate a list of references showing the sources
6	Review and analyze professional literature that is relevant to the problem statement
7-8	MID-TERM EXAM
9	Become familiar and proficient with utilizing APA style formatting
10	Develop a research design that is appropriate for a thesis/thesis project
11	Develop a research design that is appropriate for a thesis/thesis project
12	Develop a research design that is appropriate for a thesis/thesis project
13	Develop a research design that is appropriate for a thesis/thesis project
14	Develop a research design that is appropriate for a thesis/thesis project
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.	X		
4	to realize problems at the field and to decide and plan about the issues of the field.	X		
5	to be aware of the ethical principles and reflect these principles practices in the field.	X		
6	to be aware of problems experienced in application process	X		
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.	X		
13	to use library, internet, scientific data bases effectively.	X		
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611011	COURSE NAME	Mixed Method Research Design

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATEGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	40
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM		1	60

PREREQUIEITE(S)	-
COURSE DESCRIPTION	This course includes the following topics: the history and philosophy of mixed methods research, the emerging literature on it, purposes and characteristics of mixed methods research, types of research problems addressed, the specification of mixed methods purpose statements and research questions, types of major mixed methods designs, data collection and analysis strategies within mixed methods designs, and reporting and evaluating mixed methods studies.
COURSE OBJECTIVES	This course provides on introduction to mixed methods research design in the human and behavioral sciences. The purpose of this course is to provide an overview of mixed methods research.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	-
COURSE OUTCOMES	At the end of this course, students are going to; 1. Understand the philosophical assumptions underlying the use of mixed methods research. 2. Articulate the key characteristics of a mixed methods research study. 3. Use appropriate search terms for locating mixed methods research studies using computerized databases. 4. Understand and explain the rationale for using a mixed methods research approach in a study. 5. Understand and explain the major types of mixed methods research designs; their strengths and weaknesses. 6. Develop a purpose statement and research questions for a mixed methods research study. 7. Summarize the types of data that are often collected in mixed methods research and be able to distinguish between quantitative and qualitative types. 8. Summarize the data analysis strategies within mixed methods research designs. 9. Integrate or mix quantitative and qualitative data within mixed methods research designs. 10. Report and evaluate mixed methods research studies. 11. Draw a visual model of the mixed methods procedures used in the study. 12. Apply the steps in designing a mixed methods research study and develop a mixed methods study proposal.

TEXTBOOK	Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches.* Thousand Oaks, CA: Sage. [ISBN: 0-7619-0071-3] Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research.* Thousand Oaks, CA: Sage. [ISBN: 1-4129-2792-7]
OTHER REFERENCES	-
TOOLS AND EQUIPMENTS REQUIRED	Textbooks, articles.

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Introduction into mixed methods research; Emerging field of mixed methods research History and philosophy of mixed methods research
2	Purposes and applications of mixed methods research
3	Types of mixed methods designs
4	Types of mixed methods designs
5	Mixed methods purpose statement & research questions
6	Mixed methods data collection
7-8	MID-TERM EXAM
9	Mixed methods data analysis
10	Mixing quantitative and qualitative data
11	Drawing a visual diagram of mixed methods procedures
12	Validity in mixed methods research
13	Reporting and evaluating mixed methods research
14	Future of mixed methods research
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.	X		
4	to realize problems at the field and to decide and plan about the issues of the field.	X		
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.	X		
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611012	COURSE NAME	Single Subject Research

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	0	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term		
	Quiz		
	Homework		
	Project		
	Report		
	Others (……)		
FINAL EXAM			

PREREQUIEITE(S)	
COURSE DESCRIPTION	In this course; the logic, foundations, and rationale of single subject methods, calculating inter-observer agreement, including kappa, point-by-point, chance formula, and the gross method, describing the requirements, advantages, uses, and limitations of single subject and comparative single subject designs will be examined.
COURSE OBJECTIVES	This course includes an overview of behavioral measurement, single subject research designs, and methods of data analysis. Development of a single subject research proposal is required.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	During and upon completion of the course (through discussions, activities, written products, and presentations) the following knowledge and performance competencies are expected: • Describe and apply the logic, foundations, and rationale of single subject methods; • Formulate research questions for single subject studies from the literature and experience; • Define behaviors for measurement and describe methods for measuring those behaviors; • Use appropriate methods for calculating inter-observer agreement, including kappa, point-by-point, chance formula, and the gross method; • Describe the requirements, advantages, uses, and limitations of single subject and comparative single subject designs; • Describe the threats to internal validity and describe methods for minimizing and controlling for the effects of extraneous variables; • Describe the case for external validity of single subject studies; • Define and describe the measurement of the social validity of goals, procedures, and effects of single subject experimental studies; • Write the introduction, methods, and data analysis procedures for single subject studies.
TEXTBOOK	
OTHER REFERENCES	
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Describe and apply the logic, foundations, and rationale of single subject methods
2	Formulate research questions for single subject studies from the literature and experience
3	Define behaviors for measurement and describe methods for measuring those behaviors
4	Use appropriate methods for calculating inter-observer agreement, including kappa, point-by-point, chance formula, and the gross method
5	Describe the requirements, advantages, uses, and limitations of single subject and comparative single subject designs
6	Describe the threats to internal validity and describe methods for minimizing and controlling for the effects of extraneous variables
7-8	MID-TERM EXAM
9	Describe the case for external validity of single subject studies
10	Define and describe the measurement of the social validity of goals, procedures, and effects of single subject experimental studies
11	Write the introduction, methods, and data analysis procedures for single subject studies
12	Write the introduction, methods, and data analysis procedures for single subject studies
13	Write the introduction, methods, and data analysis procedures for single subject studies
14	Write the introduction, methods, and data analysis procedures for single subject studies
15-16	FINAL EXAM

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics		X	
2	to comprehend basic features of scientific research process		X	
3	to follow national and international issues at the field of Educational Research and Statistics.	X		
4	to realize problems at the field and to decide and plan about the issues of the field.	X		
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.		X	
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611013	COURSE NAME	Hierarchical Linear Modeling

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
	3	0	-	3	10	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATAGORY			
Basic Science	Educational Science	Master degree [if it contains considerable design, mark with (√)]	Social Science

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term	1	40
	Quiz		
	Homework		
	Project		
	Report		
	Others (.....)		
FINAL EXAM		1	60

PREREQUIEITE(S)	
COURSE DESCRIPTION	This course provides a conceptual framework of Hierarchical linear modeling (HLM), some important statistical theory behind the HLM, and hands-on training for applying HLM technique through analyzing example data sets and projects. It considers the formulation of statistical models for typical applications such as two-level organizational study, two-level growth model, and three-level growth model within contexts and prepares students to be able to use multilevel analysis to address research questions in their fields and write coherent summaries and interpretations of the results.
COURSE OBJECTIVES	By the end of the course students should be able to learn: 1- Studying with nested data 2- Studying with 2-level and 3-level HLM 3- Studying with HLM software
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	Studying with advanced statistical methods will be achieved
COURSE OUTCOMES	Students are going to 1- Learn HLM assumptions 2- Learn how to apply HLM steps appropriately 3- Analyze data with HLM software
TEXTBOOK	• Raudenbush, S. W. Bryk, A. S. (2002). Hierarchical linear models: Applications and data analysis methods. 2nd edition. Newbury Park, CA: Sage.
OTHER REFERENCES	• Lee, V.E. & Bryk, A.S. (1989). A multilevel model of the social distribution of high school achievement. Sociology of Education, 62, 172-192. • Seltzer, M. (2004). The use of hierarchical models in analyzing data from experiments and quasi-experiments conducted in field settings. In D. Kaplan (Ed.), Handbook of Quantitative Methodology for the Social Sciences, pp. 259-280. Thousand Oaks, CA: Sage Publications.
TOOLS AND EQUIPMENTS REQUIRED	

COURSE SYLLABUS	
WEEK	
1	Conceptual and statistical overview of HLM
2	One-way ANOVA and means-as-outcomes models
3	One-way ANCOVA models and centering
4	Slopes-as-outcomes and random-coefficient models
5	Residual analysis
6	Review of logistic regression
7-8	Vize
9	Non-Linear models
10	Non-Linear models
11	Growth models
12	Growth models
13	Three-level models
14	Three-level models
15-16	Final

	At the end of the Educational Research and Statistics Doctorate Program, students will be able to;			
No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process	X		
3	to follow national and international issues at the field of Educational Research and Statistics.	X		
4	to realize problems at the field and to decide and plan about the issues of the field.		X	
5	to be aware of the ethical principles and reflect these principles practices in the field.		X	
6	to be aware of problems experienced in application process		X	
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.		X	
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.	X		
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.	X		
12	to have positive attitude towards life time learning.		X	
13	to use library, internet, scientific data bases effectively.		X	
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):
Signature: **Date:**

ESOGÜ Department of Educational Sciences
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	543611014	COURSE NAME	Seminar

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
FALL	0	3	0	0	10	COMPULSORY ( ) ELECTIVE (x)	Turkish

COURSE CATAGORY			
Basic Science	Educational Science		Social Science
	% 75		% 25

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Article review		
	Research assignment	1	30
	Project	1	30
	Final Exam	1	40
	Report		
	Others (……)		
FINAL EXAM			

PREREQUIEITE(S)	
COURSE DESCRIPTION	In this course, students prepare a study with responsible instructor for the course using the scientific method on a given problem, and share work in the classroom.
COURSE OBJECTIVES	The main aim of the course is to gain skills like as accessing scientific data, using data, making an assessment and preparing a presentation before they pass thesis stage.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	
COURSE OUTCOMES	By the end of this course students will be able to: 1. notice a problem in the relevant field. 2. effectively carry out the scientific research process. 3. systematically think in the field of solving problems and apply analytical methods. 4. develop alternative solutions about this problem. 5. write a scientific report. 6. effectively.present their resarch reports .
TEXTBOOK	APA (2009). *Amerikan psikoloji derneği yayım kılavuzu*. İstanbul: Kaknüs Yayınları.
OTHER REFERENCES	• Türkiye Bilimler Akademisi (2002). *Bilimsel araştırmada etik ve sorunları.* Ankara: TUBA • Neuman, W. Lawrence (2008). Toplumsal araştırma yöntemleri. İstanbul: Yayınodası Yayıncılık. • McMillan, J. H., & Schumacher, S. (2006). Research in education: Evidence based inquiry. Boston, MA: Brown and Company. • Karasar, N. (1996). Araştırmalarda rapor hazırlama yöntemi. Ankara: Pars Matbaacılık. • Day R. A. (1998) Bilimsel bir makale nasıl yazılır ve yayımlanır? (Çeviren: Altay GA).Ankara: TÜBİTAK Yayınları. http://journals.tubitak.gov.tr/kitap/maknasyaz/
TOOLS AND EQUIPMENTS REQUIRED	Computer

COURSE SYLLABUS	
WEEK	**TOPICS**
1	Current developments and problems in the field
2	Determining a problem
3	The literature review
4	Preparing a research proposal
5	Data collection
6	Data collection
7-8	MID -TERM
9	Data analysis
10	Data analysis
11	Results
12	Conclusions and recommendations
13	Writing research report
14	Presentation of researh report
15-16	FINAL EXAM

No	**Program Outcomes**	**3**	**2**	**1**
1	to know the original theories and strategies in the field of Educational Research and Statistics	X		
2	to comprehend basic features of scientific research process		X	
3	to follow national and international issues at the field of Educational Research and Statistics.	X		
4	to realize problems at the field and to decide and plan about the issues of the field.	X		
5	to be aware of the ethical principles and reflect these principles practices in the field.	X		
6	to be aware of problems experienced in application process	X		
7	to communicate effectively with the practitioners and employees for supporting the field with national, international and interdisciplinary studies.	X		
8	to analyze measurement scales and statistical methods in terms of the structural and functional way.	X		
9	to analyze standart achievement tests in terms of the structural and functional way.			X
10	to use advanced statistical methods to solve educational problems.	X		
11	to learn creative, critical and dynamical thinking. Asking questions, making interpretations.	X		
12	to have positive attitude towards life time learning.	X		
13	to use library, internet, scientific data bases effectively.	X		
14	to learn which research method and statistical technic is suitable for a condition.	X		
15	to know advanced statistical techniques that using educational study and to use these techniques in the researches.	X		
	1: No Contribution 2: Partially Contribution 3: Full Contribution			

Instructor(s):

Signature: **Date:**