



**AYDIN ADNAN MENDERES UNIVERSITY**  
**GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  
**MATHEMATICS AND SCIENCE EDUCATION**  
**SCIENCE EDUCATION**  
**SCIENCE EDUCATION MASTER**  
**COURSE INFORMATION FORM**

Course Title	Fields of Specialization II								
Course Code	UZM702			Course Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	200 (Hours)	Theory	8	Practice	0	Laboratory	0
Objectives of the Course	After the student's thesis topic is determined, the latest scientific developments related to the topic of the thesis, theoretical information including publications, studies conducted to finalize the article review and thesis management and processing of courses that can help these topics								
Course Content	Scientific article scanning, selection of resources, organizing ideas, making article critics, presentation techniques, critical thinking and writing								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion, Case Study, Project Based Study, Individual Study, Problem Solving								
Name of Lecturer(s)	Res. Assist. Gülşen GÜVEN, Assoc. Prof. Abdullah ÖZDEMİR, Assoc. Prof. Abdullah YALÇIN, Assoc. Prof. Ahmet TOKSOY, Assoc. Prof. Altuğ ÖZDEN, Assoc. Prof. Arzu GÜLER, Assoc. Prof. Aslı İCİL TUNCER, Assoc. Prof. Aslı YENİPAZARLI, Assoc. Prof. Atakan HATİPOĞLU, Assoc. Prof. Aydın GERSİL, Assoc. Prof. Aynur ÇİVELEK, Assoc. Prof. Aysun SARIBEY HAYKIRAN, Assoc. Prof. Aytaç Gürhan GÖKÇE, Assoc. Prof. Berfin KART, Assoc. Prof. Bertan AKYOL, Assoc. Prof. Bülent Sarper AĞIR, Assoc. Prof. Cem ESEN, Assoc. Prof. Cengiz İskender ÖZKAN, Assoc. Prof. Cengiz ÜNSAL, Assoc. Prof. Çağrı KÖROĞLU, Assoc. Prof. Dilek KARIŞAN KORUCU, Assoc. Prof. Ece ARMAĞAN, Assoc. Prof. Elif ALADAĞ, Assoc. Prof. Emine GERÇEK, Assoc. Prof. Emre AKIN, Assoc. Prof. Erkan KIRAL, Assoc. Prof. Erkan SALAN, Assoc. Prof. Ersen YAZICI, Assoc. Prof. Esin ACAR, Assoc. Prof. Esir POYRAZOĞLU, Assoc. Prof. Evrim DERELİ FIDAN, Assoc. Prof. Eylem YILDIZ FEYZİOĞLU, Assoc. Prof. Filiz ADANA, Assoc. Prof. Funda ÇONDUR, Assoc. Prof. Gizem DÖNMEZ YALÇIN, Assoc. Prof. Göksel ERBAŞ, Assoc. Prof. Gürhan KELEŞ, Assoc. Prof. Hacı Murat ŞAHİN, Assoc. Prof. Hakan ARSLANER, Assoc. Prof. Hakan HOTUNLUOĞLU, Assoc. Prof. Hamza KAHRİMAN, Assoc. Prof. Hasan GÜLTEKİN, Assoc. Prof. Hatice Hale BOZKURT, Assoc. Prof. Haydar UNCU, Assoc. Prof. Hilal BEKTAŞ UYSAL, Assoc. Prof. Hilal ŞAHİN NADEEM, Assoc. Prof. İbrahim AKIN, Assoc. Prof. İçten Duygu ÇALLI, Assoc. Prof. Mehmet GÜLTEKİN, Assoc. Prof. Mehmet KOÇ, Assoc. Prof. Mehmet TURGUT, Assoc. Prof. Mehmet ULUKAN, Assoc. Prof. Mehtap KILIÇ EREN, Assoc. Prof. Meltem YALIN UÇAR, Assoc. Prof. Merve İrem YAPICI, Assoc. Prof. Mihrican ERDEM, Assoc. Prof. Mustafa ÖZÇAĞ, Assoc. Prof. Mustafa Özgür SEÇİM, Assoc. Prof. Necmiye CÖMERTLER, Assoc. Prof. Nermin KORUKLU, Assoc. Prof. Nural EROL, Assoc. Prof. Nursabah SARIKAVAKLI, Assoc. Prof. Osman Orkan ÖZER, Assoc. Prof. Öner CANAVAR, Assoc. Prof. Özge ÇEVİK, Assoc. Prof. Özkan EREN, Assoc. Prof. Özlem BALKIZ, Assoc. Prof. Özlem TÜTÜNCÜLER BİRCAN, Assoc. Prof. Özner ÖZDAMAR GIOVANIS, Assoc. Prof. Pınar YENGİN SARP KAYA, Assoc. Prof. Rahşan ÇEVİK AKYIL, Assoc. Prof. Reşat KARTAL, Assoc. Prof. Safiye ÖZVURMAZ, Assoc. Prof. Saime SEFEROĞLU, Assoc. Prof. Savaş DUMAN, Assoc. Prof. Selin Muradiye AKÇAY, Assoc. Prof. Selman SAĞLAM, Assoc. Prof. Sema OĞLAK, Assoc. Prof. Serap ÜNÜBOL AYPAK, Assoc. Prof. Serdal ÖĞÜT, Assoc. Prof. Serkan BAKIRCI, Assoc. Prof. Sezai KOÇYİĞİT, Assoc. Prof. Soner ALADAĞ, Assoc. Prof. Soner Sertan KARA, Assoc. Prof. Sündüz Özlem ALTINKAYA, Assoc. Prof. Şerife AK, Assoc. Prof. Tendü Hilal GÖKTUĞ, Assoc. Prof. Tolga ÜNÜVAR, Assoc. Prof. Tuncay Ercan SEPETCİOĞLU, Assoc. Prof. Tuncay SAYGIN, Assoc. Prof. Türker SARAÇOĞLU, Assoc. Prof. Utku YAPICI, Assoc. Prof. Vehbi Uğur TANDOĞAN, Assoc. Prof. Yaşar KUZUCU, Assoc. Prof. Yıldız DENAT, Lec. Abdullah AKPINAR, Lec. Adil Adnan ÖZTÜRK, Lec. Algin OKURSOY, Lec. Ali BİLGENOĞLU, Lec. Ali CENGİZ, Lec. Ali GÜREŞ, Lec. Ali İhsan YAPICI, Lec. Ali PETEK, Lec. Ali Serdar SAĞKAL, Lec. Alper KARTAL, Lec. Alper YILMAZ, Lec. Alper YORULMAZ, Lec. Arzu TANIŞ ÖZÇELİK, Lec. Ayfer METİN TELLİOĞLU, Lec. Aynur UÇKAÇ, Lec. Aysun GÜR, Lec. Ayşe Arzu KORUCU, Lec. Ayşe ELİTOK KESİCİ, Lec. Ayten CAN, Lec. Aziz BOSTAN, Lec. Barış GÜR SOY, Lec. Belgin YILDIRIM, Lec. Berfin Serdil ÖRS, Lec. Berker BULUT, Lec. Berrin GÜNER, Lec. Beste DİNÇER, Lec. Bilge DOĞANLI, Lec. Bilgen KIRAL, Lec. Birgül CAMBAZOĞLU, Lec. Birsen KIRIM, Lec. Burak FEYZİOĞLU, Lec. Bülent ÇELİK, Lec. Bülent YILDIZ, Lec. Cebrail MEYDAN, Lec. Çağatay DERECELİ, Lec. Çiğdem ALP PAMUK, Lec. Çişem BULUT ALBAYRAK, Lec. Deniz ÖZEN ÜNAL, Lec. Devrim BEYAZ, Lec. Dilan TÜYSÜZ, Lec. Duriye Esra ANGIN, Lec. Ebru GENÇALP, Lec. Elvan AKTÜRK HAYAT, Lec. Emin YİĞİT, Lec. Emre ERDAN, Lec. Emre SEVİNDİK, Lec. Engin ÇAKIR, Lec. Erdal ÖZYURT, Lec. Ersel YILMAZ, Lec. Esin ERGİN, Lec. Esin SAYIN, Lec. Fatih EYDURAN, Lec. Fatih Mehmet YILMAZ, Lec. Ferhat KİREMİT, Lec. Galip GENÇ, Lec. Gözde Başak ÖZTÜRK, Lec. Gözde İNAL KIZILTEPE, Lec. Gülsüm ALKAN, Lec. Gülşah SEZEN AKAR, Lec. Günver GÜNEŞ, Lec. Hakan ATAY, Lec. Hale UYAR HAZAR, Lec. Halil MUTİOĞLU, Lec. Halil TANIR, Lec. Hanife Can ŞEN, Lec. Hasan ERDOĞAN, Lec. Hasan ULUKAN, Lec. Hatice AKDAĞ, Lec. Hatice Kübra BAŞALOĞLU, Lec. Hatice ÖNER, Lec. Hulusi AKÇAY, Lec. Hüseyin Bilgin BİLGİÇ, Lec. Hüseyin GÜL, Lec. Hüseyin UYSAL, Lec. İbrahim GÖKDAŞ, Lec. Kemal Ramazan HAYKIRAN, Lec. Keziban AMANAK, Lec. Levent ATATANIR, Lec. Mehmet Ali SÜNBÜL, Lec. Mehmet BAŞARAN, Lec. Mehmet Eren UZ, Lec. Mehmet Mustafa KARACA, Lec. Mehmet ŞAKIROĞLU, Lec. Mehmet ULUTAŞ, Lec. Mehmet Umut TUNCER, Lec. Mehtap KIZILKAYA, Lec. Melek Ece ÖNCÜER ÇİVİCİ, Lec. Meltem ÇENGEL SCHOVILLE, Lec. Meltem İŞİK, Lec. Mesut ÇAKIR, Lec. Mesut GÜNENÇ, Lec. Murat Kemal AVCI, Lec. Murat ÖZMADEN, Lec. Musa GÜMÜŞ, Lec. Mustafa AKKAYA, Lec. Mustafa Ali KAPTAN, Lec. Mustafa ASKER, Lec. Mustafa ÇELİK, Lec. Müslime GÜNEŞ, Lec. Neşe ERDEM, Lec. Nilgün BENLİ, Lec. Nilgün SOFUOĞLU KILIÇ, Lec. Nisa BAŞARA BAYDİLEK, Lec. Nurdan GEZER, Lec. Nurettin TOPUZ, Lec. Nükhet KIRAĞ,								



Lec. Okan ARSLAN, Lec. Olcay BOYACIOĞLU, Lec. Osman NACAĞ, Lec. Ömer ÖZPINAR, Lec. Özlem AKAN, Lec. Özlem BOZKURT GİRİT, Lec. Pelin ERDAL AYTEKİN, Lec. Rafet DİNÇ, Lec. Rağşan ÇAM, Lec. Rifat AŞLIYAN, Lec. Sadık BÜYÜKYÖRÜK, Lec. Selcen ÖNCÜ, Lec. Selçuk GÖÇMEZ, Lec. Selda BULCA, Lec. Semra KÜÇÜK, Lec. Serap GÖKÇE ESKİN, Lec. Serdar ÇİFTÇİ, Lec. Serdar ÜNAL, Lec. Serhan ULUSAN, Lec. Sibel SEVİNÇ, Lec. Sibel ŞEKER, Lec. Sultan ÖZKAN, Lec. Süreyya BULUT, Lec. Şaban ERTEKİN, Lec. Şahin BULUT, Lec. Şansel ÖZPINAR, Lec. Şebnem ÖZKAN, Lec. Tacettin Hakan YENAL, Lec. Taner ARABACIOĞLU, Lec. Taner BULUT, Lec. Tuğba AKIN, Lec. Tuğrul AYYILDIZ, Lec. Turgay ERAY, Lec. Uğur TATLISUMAK, Lec. Umut EVLİMOĞLU, Lec. Umut Tolga GÜMÜŞ, Lec. Ümit ÖZYILMAZ, Lec. Yakup Onur KOCA, Lec. Yakup YAZICI, Lec. Yelda Özlem KÖLGELİER, Lec. Yılmaz ERDEM, Lec. Yusuf Ziya ARAL, Lec. Yüksel AYDOĞAN, Lec. Zeynep BOZKAN, Prof. Adem ÖZDEMİR, Prof. Adnan MELEKOĞLU, Prof. Ahmet Can BAKKALCI, Prof. Ahmet KILIÇKAN, Prof. Ali BELGE, Prof. Ali Rıza ERDEM, Prof. Alpaslan GÖKÇİMEN, Prof. Aslı SARAÇOĞLU, Prof. Aslıhan BÜYÜKÖZTÜRK KARUL, Prof. Asuman Seda SARACALOĞLU, Prof. Atakan KOÇ, Prof. Ayden ÇOBAN, Prof. Aydın ÜNAY, Prof. Ayhan YILDIZ, Prof. Ayşe Demet KARAMAN, Prof. Ayşegül BİLDİK, Prof. Ayten TAŞPINAR, Prof. Barış KARA, Prof. Bülent BOZDOĞAN, Prof. Bülent DENİZ, Prof. Bülent ULUTAŞ, Prof. Cafer TURGUT, Prof. Caner IŞIK, Prof. Cavit KUM, Prof. Celal ÜLGER, Prof. Cemal İYEM, Prof. Cengiz ÖZARSLAN, Prof. Cesur EKİZ, Prof. Cumali ÖKSÜZ, Prof. Çiğdem KILIÇASLAN, Prof. Deniz AKTAŞ UYGUN, Prof. Deniz ÇOBAN, Prof. Dide KILIÇALP KILINÇ, Prof. Dilşen İNCE ERDOĞAN, Prof. Emre CENGİZ, Prof. Engin AKDENİZ, Prof. Engin ERTAN, Prof. Ercan YEŞİLIRMAK, Prof. Ergün Ömer GÖKSOY, Prof. Erkut TURAN, Prof. Ethem AKTÜRK, Prof. Eyyüp Mennan YILDIRIM, Prof. Faik Ekmel TEKİNTAŞ, Prof. Fatih Mehmet ŞİMŞEK, Prof. Fatma DEMİRKIRAN, Prof. Fatma Neval GENÇ, Prof. Ferda BELGE, Prof. Feriştah SÖNMEZ, Prof. Ferit ÇOBANOĞLU, Prof. Filiz KÖK, Prof. Fuat SEZGİN, Prof. Funda KIRAL, Prof. Gamze BAŞBÜLBÜL, Prof. Gonca GÜNGÖROĞLU, Prof. Gonca DÜNVER DALKILIÇ, Prof. Gökhan CESUR, Prof. Gönül AYDIN, Prof. Gülgün TÜRK, Prof. Güneş ERDOĞAN, Prof. Hacı Halil BIYIK, Prof. Halil Güner SEFEROĞLU, Prof. Halil KIRNAK, Prof. Halim ESEN, Prof. Hamdi AVCI, Prof. Hasan ERDEN, Prof. Hasan EREN, Prof. Hatice EROL, Prof. Hatice ÖZENOĞLU, Prof. Hatice Seher BENLİOĞLU, Prof. Hayrettin ÇETİN, Prof. Hilal AKTAMIŞ, Prof. Hilmiye AKSU, Prof. Hülya ARSLANTAŞ, Prof. Hüseyin BAŞPINAR, Prof. Hüseyin ÜRETEK, Prof. Hüseyin VOYVODA, Prof. Hüseyin YILMAZ, Prof. İbrahim CEMAL, Prof. İbrahim ÇAKMAK, Prof. İbrahim GENÇSOYLU, Prof. İbrahim YALÇIN, Prof. İmran KURT ÖMÜRLÜ, Prof. İnci EGE, Prof. İsmail BÖĞREKÇİ, Prof. İsmet ATEŞ, Prof. Kadir KIZILKAYA, Prof. Kayhan DELİBAŞ, Prof. Kemal ERGİN, Prof. Kerem URAL, Prof. Kerim GÜNDOĞDU, Prof. Kubilay METİN, Prof. Kurtuluş OLGUN, Prof. Kürşat KARACABEY, Prof. Leyla ONAT, Prof. Mehmet Ali DEMİRAL, Prof. Mehmet AYDIN, Prof. Mehmet Erkut KARA, Prof. Mehmet Kenan TÜRKYILMAZ, Prof. Mehmet Nedim DOĞAN, Prof. Mehmet Tolga TAN, Prof. Mete KARACAOĞLU, Prof. Mevlüt TÜRE, Prof. Muhammet Bilal ARIK, Prof. Muhammet Emin GÜNAY, Prof. Murat SARIERLER, Prof. Mustafa AKŞİT, Prof. Mustafa Ali KAYNAK, Prof. Mustafa Ali SARILI, Prof. Mustafa SÜRMEK, Prof. Mürsel ÖZDOĞAN, Prof. Nazan ÜZÜM, Prof. Necdet DAĞDELEN, Prof. Neriman AYDIN, Prof. Nesrin ÖZSOY, Prof. Nilgün YENİCE, Prof. Nuh KILIÇ, Prof. Nuran AYSUL, Prof. Oğuz TÜRKÖZAN, Prof. Olcay ARABACI, Prof. Orhan KARACA, Prof. Osman Eralp ÇOLAKOĞLU, Prof. Osman EREKUL, Prof. Osman Nuri ÖZDOĞAN, Prof. Ömer ERİNCİK, Prof. Ömer Faruk Kutsi KÖSEOĞLU, Prof. Pınar Alkim ULUTAŞ, Prof. Pınar DEMİRCİOĞLU, Prof. Rauf Onur EK, Prof. Recai TUNCA, Prof. Recep ÖZMERDİVENLİ, Prof. Recep TEKELİ, Prof. Renan TUNALIOĞLU, Prof. Ruhi SARP KAYA, Prof. Ruken AKAR VURAL, Prof. Saadettin YILDIRIM, Prof. Sabri BARUTCA, Prof. Sacit Hadi AKDEDE, Prof. Sakine BOYRAZ, Prof. Sarhan SAKARYA, Prof. Selim SEKKİN, Prof. Serap AÇIKGÖZ, Prof. Serdar KOCA, Prof. Serdar PAŞA, Prof. Serkan ÖNCÜ, Prof. Sevgi ÖZSOY, Prof. Sevin KIRDAR, Prof. Sezgin DEMİR, Prof. Sultan BAYSAN, Prof. Süheyla TÜRKYILMAZ, Prof. Şadiye KUM, Prof. Şahabettin YALÇIN, Prof. Şükrü KIRKAN, Prof. Tanju DEMİR, Prof. Tufan ALTIN, Prof. Tülin AKŞİT, Prof. Tülin KARAGENÇ, Prof. Uğur ŞİRİN, Prof. Ülker EREN, Prof. Ümit TATLİCAN, Prof. Yalçın ÖZDEMİR, Prof. Yavuz KILIÇ, Prof. Yunus ÇERÇİ, Prof. Yusuf KADERLİ, Prof. Yücel BOZDAĞLIOĞLU, Prof. Yücel KOCA, Prof. Zekiye KARAÇAM, Prof. Zeynel DALKILIÇ, Prof. Zeynep GÜNEŞ, Prof. Zöhre POLAT

### Prerequisites & Co-requisites

Prerequisite	UZM701
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### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Quiz	1	20
Attending Lectures	15	20
Report	1	60

### Recommended or Required Reading

1	Thesis Writing Guide
2	Lecture notes on the selected thesis topic
3	All national and international books and publications related to the thesis topic
4	E-books and internet resources

### Week Weekly Detailed Course Contents

Week	Theoretical	Subject expression, problem solving for creating scientific foundations of the study of expertise
1		



2	Theoretical	Subject expression, problem solving for creating scientific foundations of the study of expertise
3	Theoretical	Subject expression, problem solving for creating scientific foundations of the study of expertise
4	Theoretical	Subject expression, problem solving for creating scientific foundations of the study of expertise
5	Theoretical	Data collection methods related to the field of expertise
6	Theoretical	Classification and evaluation of data related to the field of expertise
7	Theoretical	Statistical evaluation methodology
8	Theoretical	Presentation of a scientific paper related to the field of specialization
9	Theoretical	Presentation of a scientific paper related to the field of specialization
10	Theoretical	Presentation of a scientific paper related to the field of specialization
11	Theoretical	Scientific sample dissertation study suitable for specialization study
12	Theoretical	Scientific sample dissertation study suitable for specialization study
13	Theoretical	Examination of the thesis prepared for the specialization study
14	Theoretical	Examination of the thesis prepared for the specialization study
15	Theoretical	Examination of the thesis prepared for the specialization study

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	1	2	45
Assignment	4	3	2	20
Seminar	3	3	2	15
Project	2	5	5	20
Individual Work	10	5	5	100
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = ECTS				8

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	Learns the experience of the faculty members who have knowledge, experience and experience in the scientific field.
2	Has knowledge about scientific ethics and working discipline.
3	Gains the ability to evaluate and evaluate the current literature.
4	Students will be able to understand the theoretical knowledge about the thesis and follow the latest scientific developments.
5	Be able to make an article review about the thesis subject and turn the thesis topic into a project.
6	Students can write their thesis according to the rules of writing.

### Programme Outcomes (Science Education Master)

1	To be able to have an expert theoretical knowledge within the field of science education.
2	To be able to transfer expert knowledge gained in science education into various instructional environment.
3	To be able to integrate science education knowledge with the other disciplines and product functional knowledge
4	To be able to use information and communication technologies efficiently in conceptual learning
5	To be able to find scientific solutions to the problems in the field of science education
6	To be able to evaluate the knowledge critically in the field
7	To be able to participate in team projects in the science education field
8	To be able to adopt lifelong learning strategies to his/her studies
9	To be able to use at least one foreign language efficiently in oral and verbal communication
10	To be able to share national and international data in the field of science education
11	To be able to comprehend and evaluate science-technology-society and environment interactions
12	To be able to comprehends science under the ethical values and take account of ethical considerations
13	To be able to use scientific information in the other domains that is gained in the masters field and have the transfer skills
14	To be able to follow the current development in the science education field
15	To be able to develop strategical plans and evaluate them in the context of quality processes

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

	L1	L2	L3	L4	L5	L6
P1	4		4			



P2	4		5		5	4
P3	5	4	4		4	5
P4	4	4	5		5	4
P5	5	4	5	4	4	5
P6		4		5	5	5
P7	4	4	4	4	4	4
P8	5	4	5	5		5
P9	4	5	4	4	5	4
P10	4	5	5	5	4	
P11	5	5	5	4		4
P12	4	4	4			
P13	5	4		5		
P14	4			4		
P15	5			5		

