



**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                                     | Seminar  |          |              |        |                                |          |   |            |   |
| Course Code                                      | İFB701   |          | Course Level |        | Second Cycle (Master's Degree) |          |   |            |   |
| ECTS Credit                                      | 6  | Workload | 154 (Hours)  | Theory | 0                              | Practice | 2 | Laboratory | 0 |
| Objectives of the Course                         | The aim of this course is to make students gain insight and knowledge about scientific research on a specific subject and to be able to synthesize the acquired knowledge via research to be organized and demonstrated in a report. |          |              |        |                                |          |   |            |   |
| Course Content                                   | The course covers the research, synthesize, analysis processes of a specific subject determined by the student in order to work in the consultancy of a professor in the second half of the Master courses                           |          |              |        |                                |          |   |            |   |
| Work Placement                                   | N/A  |          |              |        |                                |          |   |            |   |
| Planned Learning Activities and Teaching Methods | Explanation (Presentation), Demonstration, Discussion, Case Study, Individual Study, Problem Solving   |          |              |        |                                |          |   |            |   |
| Name of Lecturer(s)                              | Assoc. Prof. Dilek KARIŞAN KORUCU, Assoc. Prof. Eylem YILDIZ FEYZİOĞLU, Lec. Burak FEYZİOĞLU, Lec. Erhan EKİCİ, Lec. Hanife Can ŞEN, Prof. Adem ÖZDEMİR, Prof. Hatice ÖZENOĞLU, Prof. Hilal AKTAMIŞ, Prof. Nilgün YENİCE             |          |              |        |                                |          |   |            |   |

#### Assessment Methods and Criteria

| Method  | Quantity | Percentage (%) |
|---------|----------|----------------|
| Seminar | 1        | 100            |

#### Recommended or Required Reading

|   |   |
|---|---|
| 1 | Fidan, Nurettin. (1986). Okulda Öğrenme ve Öğretme: Kavramlar, İlkeler, Yöntemler. Ankara.  |
| 2 | Kaptan, Saim. (1995). Bilimsel Araştırma ve İstatistik Teknikleri. Onuncu Baskı. Ankara: Bilim Yayınları.   |
| 3 | Karasar, Niyazi. (2000). Araştırmalarda Rapor Hazırlama. Onuncu Baskı. Ankara: Nobel Yayın Dağıtım.   |
| 4 | Karasar, Niyazi (1998). Bilimsel Araştırma Yöntemi. Sekizinci Baskı. Ankara: Nobel Yayın Dağıtım.   |
| 5 | Milli Eğitim Bakanlığı (1995). İlköğretim Okulu Programı. Ankara: MEB İlköğretim Genel Müdürlüğü.   |
| 6 | Milli Eğitim Bakanlığı. (1983). Cumhuriyet Döneminde Eğitim. İstanbul. Vural, Mehmet. (2000). En Son Değişiklikleriyle İlköğretim Okulu Programı. Erzurum: Yakutiye Yayıncılık. |

| Week | Weekly Detailed Course Contents |                              |
|------|---------------------------------|------------------------------|
| 1    | Theoretical                     | Determining Seminar Subjects |
| 2    | Theoretical                     | Determining Seminar Subjects |
| 3    | Theoretical                     | Literature research          |
| 4    | Theoretical                     | Literature research          |
| 5    | Theoretical                     | Literature research          |
| 6    | Theoretical                     | Collecting data              |
| 7    | Theoretical                     | Collecting Data              |
| 8    | Theoretical                     | Collecting data              |
| 9    | Theoretical                     | Collecting Data              |
| 10   | Theoretical                     | Collecting Data              |
| 11   | Theoretical                     | Data analysis                |
| 12   | Theoretical                     | Data analysis                |
| 13   | Theoretical                     | Data analysis                |
| 14   | Theoretical                     | Data analysis                |
| 15   | Theoretical                     | Report writing               |

#### Workload Calculation

| Activity         | Quantity | Preparation | Duration | Total Workload |
|------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 14       | 2           | 0        | 28             |
| Assignment       | 1        | 14          | 0        | 14             |



|   |    |   |   |     |
|---|----|---|---|-----|
| Reading                                 | 14 | 0 | 8 | 112 |
| Total Workload (Hours)                  |    |   |   | 154 |
| [Total Workload (Hours) / 25*] = ECTS   |    |   |   | 6   |
| *25 hour workload is accepted as 1 ECTS |    |   |   |     |

### Learning Outcomes

|   |   |
|---|---|
| 1 | To be able to determine problems in the study area                      |
| 2 | To be able to solve problems in the study area                          |
| 3 | To be able to make a detailed survey of the literature on a given topic |
| 4 | To be able to interpret information obtained from research studies      |
| 5 | To be able to integrate information obtained from research studies      |
| 6 | To be able to make up a scientific report with conclusions              |
| 7 | To be able to present conclusions                                       |

### 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 | L7 |
|-----|----|----|----|----|----|----|----|
| P1  | 5  | 5  | 5  | 4  | 3  | 4  |    |
| P2  | 2  | 3  |    |    |    |    | 2  |
| P3  | 4  | 4  | 3  | 4  | 5  |    |    |
| P4  |    |    |    |    |    |    | 3  |
| P5  |    | 5  | 3  |    |    | 4  |    |
| P6  | 5  | 4  | 2  | 5  | 3  |    |    |
| P7  |    | 2  |    |    |    |    |    |
| P8  | 4  |    | 4  | 3  |    | 3  |    |
| P9  |    |    | 4  |    |    |    | 3  |
| P10 |    |    | 3  |    |    | 5  | 5  |
| P13 | 3  | 3  |    |    | 5  |    |    |
| P14 | 4  | 3  | 5  |    |    | 2  |    |
| P15 |    | 2  |    |    | 2  | 3  |    |

