**ESOGU Primary Education Department** (Primary School Teaching) **COURSE INFORMATION FORM**

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| **SEMESTER** |  Spring |

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| **COURSE CODE** | 171415121 | **COURSE NAME** | Science Teaching  |

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| **SEMESTER** | **WEEKLY COURSE PERIOD** |  |
| **Theory** | **Practice** | **Labratory** | **Credit** | **ECTS** |  **TYPE OF COURSE** | **LANGUAGE OF COURSE** |
| 5 | 3 | 0 | 0  | 3 | 4 | COMPULSORY (X) ELECTIVE ( ) | Turkish |
| **COURSE CATAGORY** |
| **Professional Knowledge** | **Content Knowledge** | **General Knowledge**  | **Elective Course** |
|  | X |   | Professional Know.( ) Content Know.() Gen. Know ( ) |
| **ASSESSMENT CRITERIA** |
| **MID-TERM** | **Evaluation Type** | **Quantity** | **%** |
|  Mid-Term | 1 | 30 |
| Quiz |  |   |
| Homework | 1 | 20 |
| Project |   |   |
| Report |  |  |
| Others (………) |  |  |
| **FINAL EXAM** |   | 1 | 50 |
| **PREREQUIEITE(S)** | This course has no preliminary condition. |
| **COURSE DESCRIPTION** | Basic concepts about science and science education; science, technology, characteristics of scientific knowledge and scientific method, science and technology literacy, science-technology-society-environment relations, attitudes towards science, the purpose of science education, historical development of Turkey and the world in science education, constructivist approach and science learning, cognitive development and science education, characteristics of primary school science program and otherrelation with courses, development of scientific process skills and sample applications |
| **COURSE OBJECTIVES** | To provide students with scientific process skills, to teach contemporary approaches in science education, to apply science and technology literacy, science-technology-society-environment relations, positive attitude towards science |
| **ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION** | Teacher candidates can carry out the science course in elementary school in a functional way in their future professional life with the knowledge and skills they have learned. |
| **COURSE OUTCOMES** | At the end of this course students;1. will be able to explain the basic concepts of science and science education.2. Will be able to recognize the aims of science teaching.3. explain the historical development of science teaching.4. Explain the relationship between science teaching and constructivist approach.5. Explain the relationship between science teaching and cognitive development.6. will be able to explain the characteristics of elementary science curriculum and its relation to other courses.7. Will be able to design sample applications for developing scientific process skills. |
| **TEXTBOOK** |  AYAS, Ali Paşa ve diğerleri (2005). Kuramdan uygulamaya fen ve teknoloji öğretimi, (Ed. Salih ÇEPNİ), Ankara: PegemA yayıncılık |
| OTHER REFERENCES |  Doğan, N., Çakıroğlu, J., Bilican, K. Ve Çavuş, S. (2009). Bilimin doğası ve öğretimi, Ankara: PegemA yayıncılıkMEB (2005). İlköğretim Fen ve Teknoloji dersi (4. ve 5. sınıflar) Öğretim programı, Ankara: Milli Eğitim Talim ve Terbiye Kurulu BaşkanlığıNAKİPOĞLU, Cana ve diğerleri (2006). Fen ve Teknoloji Öğretimi (Ed. Mehmet BAHAR), Ankara: PegemA yayıncılıkBailer, J., Ramig, J. E. ve Ramsey, J. M.(2006). Teaching science process skills (Ed. Karen Thompson), USA: Frank Schaffer Publications |
| **TOOLS AND EQUIPMENTS REQUIRED** | Projector, computer, laboratory equipment |

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| **COURSE SYLLABUS** |
| **WEEK** | **TOPICS**  |
| 1 | General information about the course, source browsing |
| 2 |   Basic concepts of science and science education |
| 3 |   Historical development of science education |
| 4 |   The aims of science teaching |
| 5 |   Characteristics of primary school science curriculum and its relation with other disciplines |
| 6 |   Characteristics of primary school science curriculum and its relation with other disciplines |
| 7-8 | MID-TERM EXAM  |
| 9 | Science teaching and cognitive development |
| 10 |  Science teaching and constructivist theory |
| 11 |  Science teaching and constructivist theory |
| 12 |  Scientific process skills |
| 13 |  Preparing and presenting activities to improve scientific process skills |
| 14 |  Preparing and presenting sample activities appropriate to science curriculum |
| 15-16 |  FINAL EXAM |

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| **NO** | **PROGRAM OUTCOMES**  | **3** | **2** | **1** |
| 1 | Be able to use Turkish language suitable for rules, effectively and properly, and to communicate effectively with students. |  |  **X** |  |
| 2 | Becomes a teacher who believes in principles and reforms of Atatürk, believes in democracy and the rule of law, aware of Turkish national, spiritual, moral and cultural values, and shows awareness of them in teaching profession. |  | **X** |  |
| 3 | Have pedagogical knowledge about his/her profession area, knowing contemporary teaching methods and techniques, methods of measurement and evaluation and applies them. | **X** |  |  |
| 4 | Becomes sensitive toward society, environment and human being; raising students who will be useful to society, have confidence for future, investigative, have inquiry ability and supports lifelong learning. |  | **X** |  |
| 5 | Takes responsibility individual and group works and carry out tasks effectively. | **X** |  |  |
| 6 | Provides individual and professional development by having lifelong learning awareness and learns learning to learn. |  |  |  **X** |
| 7 | Makes self assessment. | **X** |  |  |
| 8 | Reaches knowledge about her/his profession area by using a foreign language at a basic level. |  |  | **X** |
| 9 | Have knowledge about concepts, theory and applications of teaching profession, general culture and basic science.  | **X** |  |  |
| 10 | Have ability of technical and pedagogical using for the purpose of information and communication technologies. |  |  **X** |  |
| 11 | Makes most suitable teaching plans and applications by taking into account the developmental characteristics and individual differences of students, and subject area features and acquisitions. | **X** |  |  |
| 12 | Have information about national and international education system, structure and the historical development of the elementary teacher. |  | **X** |  |
| 13 | Have respect to national culture and universal values. |  | **X** |  |
| **1**:None. **2**:Partially contribution. **3**: Completely contribution. |

**Instructor(s):** Assoc. Prof. Dr. Hüseyin Anılan  **Signature: Date:**