**SYLLABUS**

**RNK-PHIL 542: EPISTEMOLOGY OF SCIENCE: A THEORETICAL APPROACH**

(3 credits (ECTS 8 credits); 3 hours of class time per week for a 14-week semester, 3+0)

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| **Course description** | This course investigates the mental frameworks in the mind of a scientist engaged in scientific activity. Moreover, it will proceed to evaluate and try to understand these frameworks in order to question them. There will then follow an attempt to develop a five-dimensional approach to analyze these mental frameworks. |
| **Course objectives** | The course aims at developing and utilizing a specific mental framework which is identified as “five-dimensional thinking” in scientific activities in general and in science education in particular. This approach is developed in the spirit of Said Nursi’s “mana-i harfî” method. In order to fully grasp this, some of Nursi’s major ideas will be discussed and evaluated in relation to scientific research. |
| **Prerequisites** | None |
| **Textbook** | Acikgenc, A (2014), *Islamic Scientific Tradition in History*, ISTAC, Malaysia. |
| **Additional reading materials** | 1. Selected topics from *Risale-i Nur* (A compilation of relevant material from Nursi’s writings will be provided in PDF form.) 2. Selected excerpts from *Said Nursi and Science in Islam: Character Building Through Nursi’s Mana-i Harfi*  (2019), Routledge. 3. Some other materials will be added later as needed. |
| **Assessment & evaluation** | Short reflection papers and presentations throughout the semester and group projects (70%), Term paper (individual or group) (30%) |
| **Attendance** | Required through Zoom and recorded lectures |
| **Medium of instruction** | English |
| **Leading Instructor** | Prof. Alparslan Acikgenc |
| **Guest Instructors** | Prof. Yunus Cengel  Prof. Ibrahim Ozdemir  Prof. Abdul Aziz Berghout  Prof. Edward Moad |

**WEAKLY CLASSES**

(Classes start at 16:00 Istanbul Time; 14:00 London Time; 9:00 am New York Time: 21:00 Kuala Lumpur Time)

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| **Topics** | **Learning Objectives and Questions for Exploration** | **Reading assignments/ Guest instructors** |
| **LECTURE 1**  Orientation and  Introduction | Objectives of the course.  Said Nursi and his contribution to reason-based belief. | Foreword in *Said Nursi and Science in Islam* |
| **LECTURE 2**  **Science, Philosophy, and Belief** | What is science? Is a definition possible? How do we ascribe meaning to scientific information? | Introduction from *Islamic Scientific Tradition in History* (*ISTH*) |
| **LECTURE 3**  **Scientific Epistemology & Process** | Epistemology and ontology of science; Historical Perspectives of Science  Scientific Process in Civilizations | Chapter 1 Section 3 in *ISTH* |
| **LECTURE 4**  **Science today** | Science, Its domain of inquiry, Physical and nonphysical realms, and Agencies | Guest instructor: Prof.Yunus Çengel |
| **LECTURE 5**  **Worldview & Science** | Worldviews, the Nature and rise of worldviews in human minds, structure and function of worldviews. | Chapter 1.1 from *ISTH* |
| **LECTURE 6**  **Sociology of Science** | Scientific traditions and their characteristics | Chapter 1.2 from *ISTH* |
| **LECTURE 7**  **Ecology in *mana harfi* perspective** | Cosmos and the ethics of environment | Guest instructor: Prof. Ibrahim Ozdemir |
| **LECTURE 8** | Intellectual life of Said Nursi | Guest Instructor |
| **LECTURE 9**  Scientific Process in Islamic Civilization:  **The Stage of Worldview** | Worldview Stage and how its Characteristics & The Process of its Emergence | Chapter 2 in *ISTH* |
| **LECTURE 10**  **The Later Stages** | Scientific Process in Islamic Civilization: The Stages of Knowledge Tradition, Discipline and Progress | Chapter 3, 4 & 5 in *ISTH* |
| **LECTURE 11**  ***Mana Harfi* in Perspective** | *Mana harfi* in science-humans and the universe in Nursi’s works | *The Words*, 12th & 32nd Words. |
| **LECTURE 12**  **Western Scientific Tradition** | The emergence of Western scientific tradition | There will be lecture notes available |
| **LECTURE 13**  **Western Scientific Tradition** | Scientific revolution and progress.  How Western scientific tradition became global?  Mana harfi perspective at present development | There will be lecture notes available |
| **LECTURE 14**  Education in *mana harfi* perspective | The Medreset-uz-Zehra as a Civilizational Project | Guest Instructor  Prof. A. Aziz Bargouth |

**Assignments**

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| **Topics** | **Due Dates** |
| Critical reading reflection of Int. & Chapter 1, ISTH (1000 words) |  |
| Critical reading reflection of Chapter 2 of ISTH (600 words) |  |
| Critical reading reflection of Chapter 3 of ISTH (600 words) |  |
| Critical reading reflection of Chapter 4 & 5, ISTH (1000 words) |  |
| Critical reading reflection on Nursi’s 23rd Word (1000 words) |  |
| A Term paper (15 pages) |  |