

## SYMBOLIC LOGIC II

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| 1  | Course Title:                                           | SYMBOLIC LOGIC II                                                                                                                                                                                                                                                                                                                                |
| 2  | Course Code:                                            | FLS3010                                                                                                                                                                                                                                                                                                                                          |
| 3  | Type of Course:                                         | Optional                                                                                                                                                                                                                                                                                                                                         |
| 4  | Level of Course:                                        | First Cycle                                                                                                                                                                                                                                                                                                                                      |
| 5  | Year of Study:                                          | 3                                                                                                                                                                                                                                                                                                                                                |
| 6  | Semester:                                               | 6                                                                                                                                                                                                                                                                                                                                                |
| 7  | ECTS Credits Allocated:                                 | 3.00                                                                                                                                                                                                                                                                                                                                             |
| 8  | Theoretical (hour/week):                                | 2.00                                                                                                                                                                                                                                                                                                                                             |
| 9  | Practice (hour/week):                                   | 0.00                                                                                                                                                                                                                                                                                                                                             |
| 10 | Laboratory (hour/week):                                 | 0                                                                                                                                                                                                                                                                                                                                                |
| 11 | Prerequisites:                                          | none                                                                                                                                                                                                                                                                                                                                             |
| 12 | Language:                                               | Turkish                                                                                                                                                                                                                                                                                                                                          |
| 13 | Mode of Delivery:                                       | Face to face                                                                                                                                                                                                                                                                                                                                     |
| 14 | Course Coordinator:                                     | Öğr.Gör. CANER ÇİÇEKDAĞI                                                                                                                                                                                                                                                                                                                         |
| 15 | Course Lecturers:                                       | Prof. Dr. A. Kadir Çüçen - Caner Çiçekdağı                                                                                                                                                                                                                                                                                                       |
| 16 | Contact information of the Course Coordinator:          | Kadir@uludag.edu.tr;<br>Uludağ Üniversitesi Felsefe Bölümü Fen-Edebiyat Fakültesi, 16059 Görükle, Bursa - Türkiye.<br>Tel: +90 224 2941826                                                                                                                                                                                                       |
| 17 | Website:                                                | <a href="http://felsefe.uludag.edu.tr/site/node/153">http://felsefe.uludag.edu.tr/site/node/153</a>                                                                                                                                                                                                                                              |
| 18 | Objective of the Course:                                | To teach how to control to propositions' consistency, validity and equality and deductions' validity in propositional and quantifier logic by analytic table. To realize symbolization. To recognize relation between truth table and analytic table. To introduce bivalent, trivalent and polyvalent logics and differences between themselves. |
| 19 | Contribution of the Course to Professional Development: |                                                                                                                                                                                                                                                                                                                                                  |
| 20 | Learning Outcomes:                                      |                                                                                                                                                                                                                                                                                                                                                  |
|    | 1                                                       | Introduction to analytic table, Acknowledging connection between truth table and analytic table                                                                                                                                                                                                                                                  |
|    | 2                                                       | Knowing symbols of quantifiers and the others, Recognizing the bases of analytic table                                                                                                                                                                                                                                                           |
|    | 3                                                       | Learning analytic table's rules, Controlling proposition's consistency and propositions' equality and together consistency in propositional logic by analytic table                                                                                                                                                                              |
|    | 4                                                       | Controlling propositions' validity and deduction's validity in propositional logic by analytic table                                                                                                                                                                                                                                             |
|    | 5                                                       | Learning and controlling propositions' status: totology, contradictory and contingency, Understanding relation between truth table and analytic table                                                                                                                                                                                            |
|    | 6                                                       | Knowing quantifiers logic, types of propositions, its rules and its structure                                                                                                                                                                                                                                                                    |
|    | 7                                                       | Realizing symbolization; transforming propositions and deductions from spoken language to quantifier logic's language and from quantifier logic to spoken language                                                                                                                                                                               |
|    | 8                                                       | Controlling proposition's consistency and propositions' equality and together consistency in quantifier logic by analytic table                                                                                                                                                                                                                  |
|    | 9                                                       | Controlling propositions' validity and deduction's validity in quantifier logic by analytic table                                                                                                                                                                                                                                                |

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|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------|-----------------|------------------------|
|                                                                  |                                                                                                                                    | 10     | Learning alternative logics: trivalent and polyvalent logics |                 |                        |
| 21                                                               | Course Content:                                                                                                                    |        |                                                              |                 |                        |
|                                                                  | Course Content:                                                                                                                    |        |                                                              |                 |                        |
| Week                                                             | Theoretical                                                                                                                        |        | Practice                                                     |                 |                        |
| 1                                                                | Introduction to analytic table                                                                                                     |        |                                                              |                 |                        |
| 2                                                                | Acknowledging connection between truth table and analytic table                                                                    |        |                                                              |                 |                        |
| 3                                                                | Knowing symbols of quantifiers and the others                                                                                      |        |                                                              |                 |                        |
| 4                                                                | Recognizing the bases of analytic table                                                                                            |        |                                                              |                 |                        |
| 5                                                                | Learning analytic table's rules                                                                                                    |        |                                                              |                 |                        |
| 6                                                                | Controlling proposition's consistency and propositions' equality and together consistency in propositional logic by analytic table |        |                                                              |                 |                        |
| 7                                                                | Controlling propositions' validity and deduction's validity in propositional logic by analytic table                               |        |                                                              |                 |                        |
| 8                                                                | Learning and controlling propositions' status: totology, contradictory and contingency                                             |        |                                                              |                 |                        |
| 9                                                                | Understanding relation between truth table and analytic table                                                                      |        |                                                              |                 |                        |
| 10                                                               | Knowing quantifiers logic, types of propositions, its rules and its structure                                                      |        |                                                              |                 |                        |
| Activites                                                        |                                                                                                                                    |        | Number                                                       | Duration (hour) | Total Work Load (hour) |
| Theoretical                                                      | Controlling proposition's consistency and                                                                                          |        | 14                                                           | 2.00            | 28.00                  |
| Practicals/Labs                                                  |                                                                                                                                    |        | 0                                                            | 0.00            | 0.00                   |
| Self study                                                       | consistency in quantifier logic by analytic table and preperation                                                                  |        | 7                                                            | 3.00            | 21.00                  |
| Homeworks                                                        |                                                                                                                                    |        | 4                                                            | 2.00            | 8.00                   |
| Projects                                                         | deduction's validity in quantifier logic by analytic table                                                                         |        | 0                                                            | 0.00            | 0.00                   |
| Field Studies                                                    |                                                                                                                                    |        | 0                                                            | 0.00            | 0.00                   |
| Midterm Exams                                                    | polyvalent logics                                                                                                                  |        | 1                                                            | 5.00            | 5.00                   |
| Others                                                           |                                                                                                                                    |        | 4                                                            | 2.00            | 8.00                   |
| Final Exams                                                      | Materials:<br>Kutluoglu, Zekirye (2002) Basic Symbolic Logic, Ankara: Art                                                          |        | 1                                                            | 20.00           | 20.00                  |
| Total Work Load                                                  |                                                                                                                                    |        |                                                              |                 | 90.00                  |
| Total work load/ 30 hr                                           |                                                                                                                                    |        |                                                              |                 | 3.00                   |
| ECTS Credit of the Course                                        |                                                                                                                                    |        |                                                              |                 | 3.00                   |
| TERM LEARNING ACTIVITIES                                         |                                                                                                                                    | NUMBER | WEIGHT                                                       |                 |                        |
| Midterm Exam                                                     |                                                                                                                                    | 1      | 30.00                                                        |                 |                        |
| Quiz                                                             |                                                                                                                                    | 0      | 0.00                                                         |                 |                        |
| Home work-project                                                |                                                                                                                                    | 4      | 20.00                                                        |                 |                        |
| Final Exam                                                       |                                                                                                                                    | 1      | 50.00                                                        |                 |                        |
| Total                                                            |                                                                                                                                    | 6      | 100.00                                                       |                 |                        |
| Contribution of Term (Year) Learning Activities to Success Grade |                                                                                                                                    |        | 50.00                                                        |                 |                        |
| Contribution of Final Exam to Success Grade                      |                                                                                                                                    |        | 50.00                                                        |                 |                        |
| Total                                                            |                                                                                                                                    |        | 100.00                                                       |                 |                        |
| Measurement and Evaluation Techniques Used in the Course         |                                                                                                                                    |        |                                                              |                 |                        |

|                                                       |                                                               |     |       |     |          |     |        |     |             |      |      |      |      |      |      |      |
|-------------------------------------------------------|---------------------------------------------------------------|-----|-------|-----|----------|-----|--------|-----|-------------|------|------|------|------|------|------|------|
| 24                                                    | ECTS / WORK LOAD TABLE                                        |     |       |     |          |     |        |     |             |      |      |      |      |      |      |      |
| 25                                                    | CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS |     |       |     |          |     |        |     |             |      |      |      |      |      |      |      |
|                                                       | PQ1                                                           | PQ2 | PQ3   | PQ4 | PQ5      | PQ6 | PQ7    | PQ8 | PQ9         | PQ10 | PQ11 | PQ12 | PQ13 | PQ14 | PQ15 | PQ16 |
| ÖK1                                                   | 5                                                             | 5   | 4     | 4   | 5        | 4   | 5      | 5   | 5           | 5    | 4    | 5    | 0    | 0    | 0    | 0    |
| ÖK2                                                   | 4                                                             | 4   | 5     | 5   | 4        | 5   | 4      | 5   | 4           | 5    | 4    | 5    | 0    | 0    | 0    | 0    |
| ÖK3                                                   | 4                                                             | 5   | 5     | 5   | 4        | 5   | 3      | 4   | 5           | 5    | 4    | 4    | 0    | 0    | 0    | 0    |
| ÖK4                                                   | 5                                                             | 5   | 4     | 4   | 4        | 3   | 5      | 5   | 4           | 4    | 5    | 5    | 0    | 0    | 0    | 0    |
| ÖK5                                                   | 4                                                             | 4   | 5     | 4   | 5        | 5   | 3      | 5   | 4           | 5    | 4    | 4    | 0    | 0    | 0    | 0    |
| ÖK6                                                   | 5                                                             | 5   | 4     | 4   | 3        | 5   | 5      | 4   | 5           | 4    | 4    | 5    | 0    | 0    | 0    | 0    |
| ÖK7                                                   | 5                                                             | 4   | 4     | 5   | 4        | 5   | 4      | 5   | 4           | 5    | 4    | 5    | 0    | 0    | 0    | 0    |
| ÖK8                                                   | 4                                                             | 5   | 5     | 4   | 4        | 5   | 4      | 5   | 4           | 5    | 4    | 4    | 0    | 0    | 0    | 0    |
| ÖK9                                                   | 4                                                             | 4   | 3     | 5   | 5        | 4   | 4      | 5   | 4           | 3    | 4    | 5    | 0    | 0    | 0    | 0    |
| ÖK10                                                  | 5                                                             | 5   | 4     | 3   | 4        | 5   | 5      | 4   | 4           | 4    | 5    | 3    | 0    | 0    | 0    | 0    |
| LO: Learning Objectives    PQ: Program Qualifications |                                                               |     |       |     |          |     |        |     |             |      |      |      |      |      |      |      |
| Contribution Level:                                   | 1 very low                                                    |     | 2 low |     | 3 Medium |     | 4 High |     | 5 Very High |      |      |      |      |      |      |      |