

# AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| Course Title        |                 | Vocational Mathematics  |             |             |       |                                  |                |         |            |   |
|---------------------|-----------------|---|-------------|-------------|-------|----------------------------------|----------------|---------|------------|---|
| Course Code         |                 | MVU100  |             | Couse Level |       | Short Cycle (Associate's Degree) |                |         |            |   |
| ECTS Credit         | 4               | Workload  | 100 (Hours) | ) Theory    |       | 2                                | Practice       | 0       | Laboratory | 0 |
| Objectives of t     | he Course       | To comprehend the importance of mathematics in the professional sense, to provide the necessary mathematical background in order to complete the associate degree program and to better understand the numerical issues in accounting profession. |             |             |       |                                  |                |         |            |   |
| Course Content      |                 | Numbers, exponential numbers, root numbers, interest rates, and foreign exchange calculations KDV   |             |             |       |                                  |                |         |            |   |
| Work Placement      |                 | N/A   |             |             |       |                                  |                |         |            |   |
| Planned Learn       | ning Activities | and Teaching  | Methods     | Explan      | ation | (Presentat                       | tion), Problem | Solving |            |   |
| Name of Lecturer(s) |                 | Ins. Muhittin T   | URAN        |             |       |                                  |                |         |            |   |

| Assessment Methods and Criteria |          |                |  |  |
|---------------------------------|----------|----------------|--|--|
| Method                          | Quantity | Percentage (%) |  |  |
| Midterm Examination             | 1        | 40             |  |  |
| Final Examination               | 1        | 70             |  |  |

## **Recommended or Required Reading**

- 1 Basic Mathematics, Dr.E.Tuğba AKYÜZ (Textbook, 2011)
- 2 Course notes

| Week | <b>Weekly Detailed Cour</b> | se Contents   |  |  |  |
|------|-----------------------------|---|--|--|--|
| 1    | Theoretical                 | Set concept, properties, presentation of number sets  |  |  |  |
| 2    | Theoretical                 | Prime numbers, OBEB-OKEK, finite sums of consecutive natural numbers, divisibility rules    |  |  |  |
| 3    | Theoretical                 | Cyclic numbers, limited and unlimited ranges  |  |  |  |
| 4    | Theoretical                 | Identities, binomial expansion, factorization   |  |  |  |
| 5    | Theoretical                 | Base arithmetic   |  |  |  |
| 6    | Theoretical                 | Definition and properties of exponential and rooted expressions, question solutions         |  |  |  |
| 7    | Theoretical                 | The concept of ratio and proportion, proportional types, average types and applications     |  |  |  |
| 8    | Intermediate Exam           | midterm exam  |  |  |  |
| 9    | Theoretical                 | First and second order equations with one unknown   |  |  |  |
| 10   | Theoretical                 | KDV calculations in the accounting process  |  |  |  |
| 11   | Theoretical                 | Yüksek dereceli bir bilinmeyenli denklemlerin çözüm yolları                                 |  |  |  |
| 12   | Theoretical                 | Eşitsizlikler, işaret tabloları, eşitsizlik simgeleri                                       |  |  |  |
| 13   | Theoretical                 | Definition of absolute value, properties, absolute value equations and inequality solutions |  |  |  |
| 14   | Theoretical                 | Foreign exchange calculation in accounting transactions                                     |  |  |  |
| 15   | Final Exam                  | Final exam  |  |  |  |

| Workload Calculation                           |            |  |             |                      |                |  |
|--|------------|--|-------------|----------------------|----------------|--|
| Activity                                       | Quantity F |  | Preparation | Duration             | Total Workload |  |
| Lecture - Theory                               | 14         |  | 0           | 2                    | 28             |  |
| Assignment                                     | 12         |  | 0           | 5                    | 60             |  |
| Midterm Examination                            | 1          |  | 5           | 1                    | 6              |  |
| Final Examination                              | 1          |  | 5           | 1                    | 6              |  |
|  |            |  | To          | tal Workload (Hours) | 100            |  |
| [Total Workload (Hours) / 25*] = <b>ECTS</b> 4 |            |  |             |                      | 4              |  |
| *25 hour workload is accepted as 1 ECTS        |            |  |             |                      |                |  |

## **Learning Outcomes**

- 1 Can solve absolute problems.
- 2 Üslü ve köklü ifadelerle işlem yapmayı öğrenir.



Learn how to classify equations and use different solutions according to their degree.
To be able to calculate numerical data in accounting transactions
Solve systems formed by multiple equations.

#### **Programme Outcomes** (Accounting and Tax Practices)

- Being an individual who is respectful to his own values, fits ethical rules, investigates and examines environment, events, and takes lessons.
- To have theoretical knowledge and to manage the process which will contribute to the solution of the various problems that may arise during the professional activity and to obtain the expected practical results in practice.
- To have theoretical knowledge supported by textbooks with current information, application tools and other resources, and to be able to discuss using any kind of information related to this field.
- 4 Be able to apply and evaluate all the techniques that the accounting profession should have.
- Ability to plan, implement and evaluate all activities (such as financial statements and financial statements, keeping accounts in a computer environment, etc.) performed in the business and finance world, accounting bureaus and tax-related institutions.
- In the sector or institutions that it supports during its activities; to be able to interpret and evaluate data using the knowledge and skills gained in the field, to be able to recognize and analyze problems, and to be able to develop evidence-based solutions.
- 7 Ability to gain personality traits showing planning and decision making skills.
- To be able to comprehend the importance of the developments of the business and financial world and the knowledge that they have in this direction, to be able to develop the concepts of creativity and creative thinking, to be able to realize the effects of professional activities in the applied fields.
- 9 To be able to evaluate and interpret the knowledge and skills gained in the professional field.
- Be able to develop personality traits that develop environmental awareness, respect for differences, and adapt to different situations and social roles.
- 11 To be able to use communication techniques properly while maintaining human relations.
- To be able to use information and communication technologies together with the computer software required by the professional field
- To be able to inform related persons and institutions about the issues related to the field during the professional work, to be able to transmit suggestions of solutions to problems and problems in writing and orally.
- To have sufficient consciousness about the universality of social rights, social justice, protection of quality culture and cultural values and environmental protection, occupational health and safety issues.

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

|     | L1 |
|-----|----|
| P14 | 3  |

