

## **COURSE SYLLABUS**

## **Vocational School**

| Cour   | rse Code             | Course Name   |  |                    | Credit                                | E                                  | CTS Value                 |  |  |  |  |
|--|----------------------|---|--|--------------------|---------------------------------------|------------------------------------|---------------------------|--|--|--|--|
| MA   | AT-117 Biostatistics |   |  |                    | 2-0-2                                 |                                    | 5                         |  |  |  |  |
|  | equisite             | None  |  |                    |                                       |                                    |                           |  |  |  |  |
| Courses: Course Language:  |                      | Turkish   | Teaching Style:                                |                    |                                       | Online                             |                           |  |  |  |  |
| Cour   | rse Type<br>Level:   | Compulsory/Fall Semester/Associate Degree                               |  |                    |                                       |                                    |                           |  |  |  |  |
|  |                      | e and Surname of the Course<br>Instructor                               | Class Hours Office Hours                       |                    |                                       | s Communication                    |                           |  |  |  |  |
| Lecturer Mehmet ŞENGÜL   |                      |   | 2  | 13.00              | nday<br>-13.30<br>-14.15              | mehmetse                           | hmetsengul@cag.edu.<br>tr |  |  |  |  |
| Cour   | rse<br>rdinator:     | Lecturer Mehmet ŞENGÜL  |  |                    |                                       |                                    |                           |  |  |  |  |
| Purpose of the Course  |                      |   |  |                    |                                       |                                    |                           |  |  |  |  |
|  |                      |   |  |                    | Relati                                | Relationships                      |                           |  |  |  |  |
| nes  | Students             | s who successfully complete this cour                                   | se;  |                    |                                       | Program<br>Outcomes                | Net<br>Contribution       |  |  |  |  |
| ıtco   | 1                    | Knows and illustrates biostatistical                                    | Knows and illustrates biostatistical concepts. |                    |                                       |                                    |                           |  |  |  |  |
| J Or   | 2                    | Understands and interprets statistic                                    |  | 5,7                | 5,3                                   |                                    |                           |  |  |  |  |
| Course Learning Outcomes   | 3                    | Makes interpretations/predictions a past data.                          | on   | 5,7                | 5,3                                   |                                    |                           |  |  |  |  |
| , Le   | 4                    | Knows how to classify data.   |  | 5,7,8              | 5,3,4                                 |                                    |                           |  |  |  |  |
| urse   | 5                    | Knows biostatistical concepts and r                                     |  | 5,7                | 5,3                                   |                                    |                           |  |  |  |  |
| ပိ   | 6                    | ŭ ŭ   | edge of measuring health and disease.          |                    |                                       |                                    |                           |  |  |  |  |
|  | 7                    | Can provide quantitative examples in the field of health in daily life. | •  |                    | 5                                     | 5                                  |                           |  |  |  |  |
| The aim of the Biostatistics course is to define statistics as a socio-technical system, extraction the concepts and objectives of biostatistics in its field, discuss its relationships numerical health data, and provide analytical thinking skills, understand the meaning biostatistical data, and add statistical value to events. |                      |   |  |                    |                                       |                                    |                           |  |  |  |  |
|  |                      | Course Contents   | : (Weekly Les                                  | sson Pl            |                                       |                                    |                           |  |  |  |  |
| Wee  | k                    | Subject   | Prepar   | ation              |                                       | Teaching Methods and<br>Techniques |                           |  |  |  |  |
| 1  | of Bas               | se Introduction What is the Concept sic Statistics and Biostatistics?   | None   |                    |                                       | Explanation, Examples, Exercise    |                           |  |  |  |  |
|  |                      | Concepts in Research Methods erse, Sample, Data, Variable, neter)       | Textbook, L<br>Notes, Pres                     | resentation exampl |                                       | nples                              |                           |  |  |  |  |
| 3  | Scien                | tific Research Processes  | Textbook, L<br>Notes, Pres                     |                    |                                       |                                    | ically, give              |  |  |  |  |
| 4  | or wh                | mining the Research Problem (What ich topic will we study)              | Textbook, L<br>Notes, Pres                     |                    | Explain systematically, give examples |                                    |                           |  |  |  |  |
| 5  |                      | arch design, Data Collection  | Textbook, L                                    |                    |                                       | Explain systematically, give       |                           |  |  |  |  |

Notes, Presentation

examples

Techniques



| 6  | Descriptive Statistics I: G<br>Tables, Measures of Cen<br>(Mean, Mode, Median)  |             | ency Not  |  | xtbook, Lecture<br>ites, Presentation |  | systematically, giving solving questions |  |  |
|--|---|-------------|-----------|--|---------------------------------------|--|--|--|--|
| 7  | Descriptive Statistics II: F<br>Tables, Measures of spre<br>standard deviation), skew<br>kurtosis   | ead (varian | ce,       | , Textbook, Lecture<br>Notes, Presentation |                                       | Explaining systematically, giving examples, solving questions together |  |  |  |
| 8 Midterm Exam   |   |             |           |  |                                       |  |  |  |  |
| 9 Midterm Exam   |   |             |           |  |                                       |  |  |  |  |
| 10   | Sampling and Sampling I<br>Sampling Methods, Samp<br>Calculations   |             |           |  | otes, Presentation examples together  |  | systematically, giving solving questions |  |  |
| 11   | Data Analysis   |             | No        |  | xtbook, Lecture<br>ites, Presentation | Explaining systematically, giving examples, solving questions together |  |  |  |
| Statistical Data Sources I<br>12 of Health and Statistics R<br>Evaluation of Hospital Se |   | elated to t | ed to the |  | ers Kitabı, Ders<br>otları, Sunu      | Explain systematically, give examples                                  |  |  |  |
| 13   | Measuring Health and Dis<br>Level Indicators)   | sease (He   |           |  | xtbook, Lecture<br>ites, Presentation | Explaining systematically, giving examples, solving questions together |  |  |  |
| 14   | Measuring Health and Di<br>Level Indicators)  |             |           |  | xtbook, Lecture<br>otes, Presentation | Explaining systematically, givin examples, solving questions together  |  |  |  |
| 15   | Statistically, Turkey's Hea   | alth Level  |           |  | xtbook, Lecture<br>otes, Presentation | Explain systematically, give examples                                  |  |  |  |
| 16   | General Review and Sam<br>Solutions   | nple Quest  | stion Tex |  | xtbook, Lecture<br>otes, Presentation | General review and sample question solutions                           |  |  |  |
| 17   | 17 Final Exam   |             |           |  |                                       |  |  |  |  |
| 18 Final Exam  |   |             |           |  |                                       |  |  |  |  |
|  |   | Res         | ources    | for  | the Course                            |  |  |  |  |
| Textboo  | Textbook: Presentation  |             |           |  | ns prepared by the instructor.        |  |  |  |  |
| Recomi   | al Directorate of Health Information Systems, Health Statistics<br>2023.<br>tistics; Prof. Dr. Ömer AKBULUT, Atatürk University Open<br>1 Faculty, ISBN: 978-975-442-450-8; Erzurum; 2018 |             |           |  |                                       |  |  |  |  |
|  |   | Course A    | Assessr   | nen  | t and Evaluation                      |  |  |  |  |
| Events Number  |   |             |           | Contrib<br>ution                           |                                       | Notes  |  |  |  |
| Midterm Exam 1   |   |             | %40       |  |                                       | -  |  |  |  |
| Final 1  |   |             |           | Comprehensive written exam                 |                                       |  |  |  |  |
|  |   |             |           | TS Table                                   |                                       |  |  |  |  |
| Contents   |   |             |           | hber Hour<br>4 2                           |                                       |  | Total                                    |  |  |
| Lesson duration  |   |             |           | 2  |                                       |  | 28                                       |  |  |
| Out-of-Class Work  |   |             |           | 2  |                                       |  | 28                                       |  |  |
| Midterm Exam (Midterm Exam Duration + Midterm Exam Preparation)                          |   |             |           |  | 35                                    |  | 35                                       |  |  |
| Final Exam (Final Exam Duration + Final Exam Preparation)                                |   |             |           |  | 45                                    |  | 45                                       |  |  |
|  |   |             |           |  |                                       | Total:   | 136/30=4,5                               |  |  |



| Total / 30:   | 5               |
|---------------|-----------------|
| ECTS Credits: | <b>ECTS</b> : 5 |