

ESOGÜ Mathematics - Computer Department COURSE INFORMATION FORM

| SEMESTER | Spring |
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| COURSE | 821615007 | COURSE | Applied Statistics |
|--------|-----------|--------|--------------------|
| CODE | 821013007 | NAME | |

| SEMESTE | SEMESTE WEEKLY COURSE PERIOD | | | | COURSE OF | | | | | |
|----------|------------------------------|-------------------------|-------|---|--|------------|--------------------------|---------------------|--|--|
| R | | | Labra | atory | Credit | ECTS | ТҮРЕ | LANGUAG E | | |
| 5 | 3 | 0 | 0 |) | 3 | 5 | COMPULSORY() ELECTIVE(x) | Turkish | | |
| | • | • | | COUR | SE CATA | GORY | | • | | |
| Mathemat | ics | Compute | er | | | | | Social Science | | |
| X | | | | | | | | | | |
| | | | A | | MENT CF | | | | | |
| | | | | | aluation T | Ype | Quantity | % | | |
| | | | | 1st Mid-Term 1 | | | 1 | 40 | | |
| | | | | | id-Term | | | | | |
| | MID-T | ERM | | Quiz Homework | | | | | | |
| | | | | | | | | | | |
| | | | | Project | | | | | | |
| | | | | Report | | | | | | |
| | | | | Otners | () | | 1 | 60 | | |
| | FINAL 1 | EXAM | | | | | 1 | 60 | | |
| P | REREQU | JIEITE(S) | None. | | | | | | | |
| cot | COURSE DESCRIPTION di B in | | | Probability calculation, probability calculation with repeated trials, probability functions, cumulative distributions, expected value, arithmetic mean, variance, moment, discrete distributions, continuous distributions. Basic concepts and properties of statistics, sampling, statistical interpretation and inference, importent statistical means, sampling distributions, papulation parameter. | | | | | | |
| CO | URSE OB | BJECTIVES | | To give basic concepts and properties of probability. To determine probability problems, analyse them and find the solition methods. To give basic concepts and properties of statiatics. To determine statistical problems, analyse them and find the solition methods. | | | | nethods. termine | | |
| | | URSE TO AP L EDUATIO | | Students should be able to determine problems solveable with probabilitical and statistical calculation, analyse them and find the solution methods. | | | | | | |
| СО | URSE O | UTCOMES | | Gain sufficient knowledge of Applied Statistics subject, related w science and own branch; an ability to apply theoretical and practiknowledge on solving and modeling of problems. | | | | | | |
| | TEXTE | воок | | Lecture notes. | | | | | | |
| OT | HER REI | FERENCES | | OlTeOlMaMa | Olasılık, İ. Kara, Bilim Teknik Yayınları, 2000. Temel İstatistik, N. Çömlekçi, Bilim Teknik Yayınları, 2005. Olasılık ve İstatistik , F. Akdeniz, Baki Kitapevi Yayınları, 2002 Matematiksel İstatistik I Ders Notları , V. Yılmaz, H. E. Çelik. Matematiksel İstatistik II Ders Notları , V. Yılmaz, H. E. Çelik | | | | | |

| TOOLS AND EQUIPMENTS REQUIRED | None. |
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| COURSE SYLLABUS | | | | | |
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| WEEK | TOPICS | | | | |
| 1 | Probability calculation, probability | | | | |
| 2 | Calculation with repeated trials | | | | |
| 3 | Probability functions | | | | |
| 4 | Cumulative distributions | | | | |
| 5 | Mid-term exam | | | | |
| 6 | Expected value | | | | |
| 7 | Arithmetic mean | | | | |
| 8 | Variance, Moment | | | | |
| 9 | Discrete distributions, continuous distributions | | | | |
| 10 | Mid-term exam | | | | |
| 11 | Basic concepts and properties of statistics | | | | |
| 12 | Sampling, statistical interpretation and inference | | | | |
| 13 | | | | | |
| 14 | Sampling distributions, population parameter | | | | |
| 15 | Final Exam | | | | |
| 16 | Probability calculation, probability | | | | |

| NO | PROGRAM OUTCOMES | 3 | 2 | 1 |
|----|---|---|---|---|
| 1 | The ability to apply knowledges of Mathematics - Computer, | | | |
| 2 | To have sufficient theoretical and practical knowledge of Mathematics at international level, | | X | |
| 3 | The ability of describing, modelling and solving of mathematical problems at Mathematics and related subjects, | | X | |
| 4 | The skill to solve and design a problem process in accordance with a defined target, | | | |
| 5 | | | X | |
| 6 | The skill to use the modern techniques and computational tools needed for mathematical applications, | X | | |
| 7 | The skill to make team work within the discipline and interdisciplinary, | X | | |
| 8 | The ability to improve oneself by following the developments on other modern, scientific and technological subjects as well as Mathematics - Computer, | | X | |
| 9 | The skill to communicate orally and in written way, in a clear and concise manner by having individual work skills and ability to independently decide and analytical thinking, | | X | |
| 10 | | | X | |
| 11 | The skill to have consciousness for quality issues and scientific research, | | X | |
| 12 | The skill to be sensitive to environmental issues related with problems and development of living area and consistent in the social relations, | | X | |
| 13 | Ability to solve problems in the working life faced to find an appropriate algoritms via mathematical modeling and to write computer programs, | | X | |
| 14 | The skill to developed design of software systems at different complex levels, | | | X |
| 15 | The credence of necessity of life-long learning and ability to apply the formation long-life learning. | X | | |

| 1.None. 2.Par |
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| Instructor(s): |
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Signature: