

# **BİST 101- BIOSTATISTICS AND MEDICAL INFORMATICS**

**Prof.Dr. Bahar TAŞDELEN**

## **2. Term**

1. week	Research methods in health sciences and introduction to biostatistics.
2. week	Definitions and concepts, variable types.
3. week	Collection of data obtained in health field and recording in Excel.
4. week	Graphical summarization of data obtained in health field.
5. week	Descriptive statistics of the data obtained in the field of health (central tendency measures)
6. week	Descriptive statistics of the data obtained in the field of health (measures of change)
7. week	Normal distribution and standard normal distribution
8. week	Hypothesis tests (z and t test) and confidence interval for the researches planned to be carried out in the field of health
9. week	The parametric hypothesis test (independent t test) for the comparison of the mean of two independent groups
10. week	The parametric hypothesis test (paired t test) for comparison of the mean of two dependent groups
11. week	Controlling the first-type error in research (Part 1): Preliminary condition, test power, nonparametric tests (Mann Whitney U test and Wilcoxon test)
12. week	Mid-term Exam
13. week	Controlling the first-type error in research (Part 2): One-way analysis of variance
14. week	Multiple comparisons (post-hoc test)
15. week	Calculation of correlation coefficient and hypothesis control, Simple linear regression and hypothesis test
16. week	Final Exam