Course program and reading list
Semester 1 Year 2021

School: Baruch Ivcher School of Psychology

Introduction To Statistics A

Lecturer:
Prof. Yaniv Kanat-Maymon  ykanat@idc.ac.il

Tutors:
Dr. Michal Kanat-Maymon  kanat.michal@idc.ac.il
Dr. Moran Aliman  aliman.moran@idc.ac.il
Dr. Karin Zohar Cohen  zckarin@idc.ac.il

Course No.: 8910  Course Type: Lecture  Weekly Hours: 2  Credit: 3.5

Course Requirements: Final Exam  Group Code: 211891010  Language: English

Prerequisites

Students who took one of the courses listed below will not be allowed to register to the course Introduction To Statistics A (8910):

8004 - Introduction To Statistics
8149 - Brain and Mind research seminar

Course Description
<table>
<thead>
<tr>
<th>Week</th>
<th>Subjects</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction – population, sample, variable, correlation, causality, research designs</td>
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<tr>
<td>2-3</td>
<td>Scales of measurement, transformations, aggregated scores, tables, charts, shapes of distributions</td>
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<td>4-5</td>
<td>Sigma laws, central tendency indices: mean, median, mode, mid-range; effect of transformations</td>
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<tr>
<td>6-7</td>
<td>Dispersions indices: range, inter-quartiles range, variance, standard deviation; effect of transformations</td>
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<tr>
<td>8</td>
<td>Relative position measures: percentiles, Z score</td>
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<td>9</td>
<td>The normal distribution</td>
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<tr>
<td>10-12</td>
<td>Correlation coefficients: Cramer, Spearman, Pearson; the effect of linear transformations</td>
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<tr>
<td>13</td>
<td>Summary: descriptive statistics</td>
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**Course Goals**

The purpose of the course is to equip students with basic knowledge in Statistics which will allow them to critically read and understand research reports based on statistical analyses, and enable them to conduct simple statistical analyses. The course will focus on Descriptive Statistics – methods and statistical indexes aimed at describing types of variables, data distribution, and associations between two variables.

**Grading**

10% - Weekly homework assignments: passing grade on at least 9 assignments.

15% - 3 home-quizzes.
75% - Final exam.

Teaching Assistant

**Lecturer:** Yaniv Kanat-Maymon, Phd  (ymaymon@gmail.com)

**Teaching assistants:**

- Karin Zohar, Phd  karin.zoharcohen@gmail.com
- Moran Aliman, Phd  Moranstudents@gmail.com
- Michal Kanat-Maymon, Phd  idc2.michalkm@gmail.com
- Sahron Riwkes, Phd  sharonriwkesIDC@gmail.com

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**Additional Notes**

Disturbing the class by making noise or other disruptions *will not be tolerated.* It is an infringement of the rights of other students to learn, and a disciplinary offense at IDC Herzliya. The lecturer will instruct disrupting parties to leave the classroom immediately. A second offence will automatically be brought before the IDC Disciplinary Board, with significant academic consequences.

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**Reading List**