



Bar-Ilan University
אוניברסיטת בר-אילן

קורס מספר: 60-997-01

שם הקורס: שיטות סטטיסטיות מחקריות א'

סוג הקורס: הרצה
שנה / סמסטר: תשע"ו שנתי

היקף שעות: 2 ש"ש ניקוד: 2

[פרטי התקשרות עם המרצה](#)

שם המרצה: פרופ' מיכל לבידור

תאריך עדכון אחרון: 11/05/2015

מטרות הקורס / תוצרי הלמידה*:

The overall purpose of the course is to review with the students some of the major topics in designing a study and analyzing the data that emanates from it.

We first discuss some of the overall issues that are relevant for controlled experiments, field studies, and observations – tailored to the students' needs; special emphasis is placed on factors that affect external and internal validity

In particular, we discuss some of the requirements of planning a study and subsequent data screening issues such size of N, normality, multicollinearity, missing data, outliers. Transformations are presented to solve some of the problems raised in research. Multivariate techniques that they have already been studied in their previous courses are presented and shown how they apply or don't apply to their Ph.D. research projects. In particular, moderator and mediator identification are illustrated.

Next we spend time on the whole issue of null hypothesis testing and criticisms beginning with Jack Cohen's (1994) are discussed. Type 1 error, Type II errors, and Bayes' theorem and its implications for research are delved into. In addition, various research topics that were not presented in previous courses are discussed: Logit analysis, multi-way frequency, discriminate, profile analysis, HLM. The emphasis on these topics varies from year to year depending on student needs.

Finally, students must hand in, in English, a meta-analysis report.

תאור הקורס:

| Topic | Week |
|--|-------|
| Introduction to research | 1 |
| Review of some basic inferential statistics | 2-3 |
| Research Design issues | 4-5 |
| Data Screening-problems and solutions | 6-8 |
| Power, Ho (a la Cohen), Bayes, error | 7-9 |
| Moderators, mediators, and combinations | 10,11 |
| Review of different multivariate techniques including: Logit, Discriminant Analysis, HLM | 12-13 |
| Clustering, Profile analysis | |

| Topic | Week |
|---|------|
| Structural Equation modeling (year 1) | 1-4 |
| Meta-analysis (year 2) | |
| Individual meetings and discussions of each individual or group's project | 5-13 |

דרישות קדם:
none

חובות / דרישות / מטלות:**

In English: A PAPER (approximately 10-15 pages including tables, references) on a meta-analytic topic-individually or in groups

מרכיבי הציון הסופי:

Course is Pass Fail based on the submitted work

ביבליוגרפיה:

Fidell, L. S. & .Readings: Tabachnick, B. G (2006). Using Multivariate Statistics. New York: Harper Collins

Various papers pending on students' research areas

שם הקורס באנגלית: 

statistical methods

* תוצרי הלמידה (learning outcomes) הן הצהרות המציינות במפורש מה הלומדים צפויים להשיג בסוף תקופת הלימוד בקורס. תוצרי הלמידה מוגדרים במונחים של הישגי ידע, הבנה, כישורים, יכולות ו/או עמדות שהלומד מצופה להדגים כתוצאה מהתנסותו הלימודית האקדמית בקורס. לפרטים נוספים [לחץ כאן](#).
