## **Methods in Advanced Experimental Research**

### Course code: SPRÅK 8864 - Methods of Linguistics 2 (LingPhil)

• **Time:** Wednesday 29 - Friday 31 March, 2017

• Place: Campus Dragvoll, NTNU Trondheim, room 3432

• Course instructor: Professor David Saldaña, University of Seville

• **Credits:** 7,5 ECTS. 5 ECTS for attendance and presentation of own project design during the course + 2.5 ECTS for submitting a 2000 word paper after the course.

Responsible instituion: NTNUOrganizer: Mila Vulchanova

# **Course summary**

This course is aimed to provide students with background knowledge of designing and conducting empirical research producing reliable and valid results in language-development research. The first part of the course will provide an introduction to selecting variables, choosing a paradigm and methodology, experiment and nonexperimental design, and preparation for running a study. Ethical issues in research will also be addressed.

#### **Course content**

- 1. Defining your study: aims, hypotheses, variables, design, and ethics
- 2. Experimental design.
- 3. Nonexperimental research design.
- 4. Collecting your data: participants, group selection, instruments and techniques.

#### Programme

Wednesday, 29th

09.30 — 11.30 Defining your study: aims and hypotheses

12.30 — 14.30 Methods in language acquisition and psycholinguistics.

Experimental design in language studies: variables and types of designs

14.30 — 16.30 Experimental design in language studies: applications and examples

16.30 – 17.30 Student design presentations

19.00 Course Dinner

Thursday, 30th

09.30 - 11.30 Non-experimental research design in language studies.

12.30 — 14.30 Intervention studies

14.30 - 16.30 Collecting your data: participants, group selection, instruments and techniques, ethics.

Open science, data sharing, and data plans.

16.30 – 17.30 Student design presentations

Reading list and references

Blom, W. B. T., & Unsworth, S. (Eds.). (2010). *Experimental methods in language acquisition research*. Philadelphia: John Benjamins Pub. Company.

Bulkeley, K., Bundy, A., Roberts, J., & Einfeld, S. (2013). ASD intervention research in real world contexts: Refining single case designs. *Research in Autism Spectrum Disorders*, 7(10), 1257-1264. https://doi.org/10.1016/j.rasd.2013.07.014

Crawford, J. R., & Howell, D. C. (1998). Comparing an Individual's Test Score Against Norms Derived from Small Samples. *The Clinical Neuropsychologist (Neuropsychology, Development and Cognition: Section D)*, *12*(4), 482-486. https://doi.org/10.1076/clin.12.4.482.7241

Elmes, D. G., Kantowitz, B. H., & Roediger, I. H. L. (2011). *Research Methods in Psychology* (9 edition.). Belmont, CA: Cengage Learning.

Facon, B., Magis, D., & Belmont, J. M. (2011). Beyond matching on the mean in developmental disabilities research. *Research in Developmental Disabilities*, 32(6), 2134-2147.

https://doi.org/10.1016/j.ridd.2011.07.029

Garrod, S. (2006). Psycholinguistic Research Methods. In K. Brown (Ed.), *Encyclopedia of Language & Linguistics (Second Edition)* (pp. 251–257). Oxford: Elsevier.

Heredia, R. R., Altarriba, J., & Cieślicka, A. B. (Eds.). (2016). *Methods in bilingual reading comprehension research*. New York: Springer.

Howard, D., Best, W., & Nickels, L. (2015). Optimising the design of intervention studies: critiques and ways forward. *Aphasiology*, *29*(5), 526-562. https://doi.org/10.1080/02687038.2014.985884

Jarrold, C., & Brock, J. (2004). To match or not to match? Methodological issues in autism-related research. *Journal of Autism and Developmental Disorders*, *34*(1), 81-86.

Mackey, A., & Gass, S. M. (Eds.). (2012). *Research methods in second language acquisition: a practical guide*. Oxford: Wiley-Blackwell.

Mervis, C. B., & Klein-Tasman, B. P. (2004). Methodological Issues in Group-Matching Designs:  $\alpha$  Levels for Control Variable Comparisons and Measurement Characteristics of Control and Target Variables. *Journal of Autism and Developmental Disorders*, 34(1), 7-17.

https://doi.org/10.1023/B:JADD.0000018069.69562.b8

Moher, D., Schulz, K. F., & Altman, D. G. (2001). The CONSORT statement: revised recommendations for improving the quality of reports of parallel group randomized trials. *BMC Medical Research Methodology*, 1(1), 2. https://doi.org/10.1186/1471-2288-1-2

Myers, A., & Hansen, C. H. (2011). *Experimental Psychology* (7 edition.). Belmont, CA: Cengage Learning.

Sekerina, I. A., Fernández, E. M., & Clahsen, H. (2008). *Developmental Psycholinguistics: On-line Methods in Children's Language Processing*. John Benjamins Publishing.

Tate, R. L., Perdices, M., McDonald, S., Togher, L., & Rosenkoetter, U. (2014). The design, conduct and report of single-case research: Resources to improve the quality of the neurorehabilitation literature. *Neuropsychological Rehabilitation*, *24*(3-4), 315-331.

https://doi.org/10.1080/09602011.2013.875043

Friday, 31st

10.00 – 12.30 Master Class on experimental research

Martina Micai (University of Seville/NTNU) "Reading comprehension mechanisms in autism spectrum disorder: Metacognitive processes and executive function" with Master Prof. Joel Talcott (Aston University, UK)