Course overview: Introduction to quantitative research methodology 2020	
Venue:	Day 1 and 2: To be announced; Day 3 and 4: To be announced
Teacher:	Robert (Bobby) Zachariae
Dates:	October 19–20 and 26-27, 2020 (note starting times on the 19th and 26st).
ECTS	5
Date	**Areas/themes covered:**
Assignment prior to the course	a) Description of research project and its main challenges
Day 1 October 19, 2020 10.00 – 17.00 Room: To be announced	Introduction to the course. From idea to research design. The research process. My research question. Requirements for scientific hypotheses. Types of research designs: Strengths and limitations. Group exercises: Discussing and evaluating the participants' research ideas, research questions, and hypotheses. Background: the existing knowledge as starting point for my research project – what will my study add?
Home-assignment	b) My chosen research design – strengths and limitations
Day 2 October 20, 2020 09.00 – 16.00 Room: To be announced	My chosen design: sensitivity, precision, and possible sources of error. Statistical and practical significance. Reviewing the literature and combining existing results. My research project: Effect sizes, sample size, and statistical power.
Home-assignment	c) Recruitment and attrition – choices and challenges
Day 3 October 26, 2020 10.00 – 17.00 Room: To be announced	Recruitment, response rates, and dropouts. Exercises. The quality of my assessment methods and instruments (focus: questionnaire/survey methods) Developing items, validating questionnaires, factor structure, internal consistency, differential item function, adapting questionnaires into another language. Research ethics and scientific misconduct. Ethical challenges in my research project.
Home-assignment	d) My analytical strategy – e) My strengths and challenges as researcher
Day 4 October 27, 2020 09.00 – 16.00 Room: To be announced	Analytical strategies. Analyzing my data: analytical strategy, data-management: "Cleaning up my act", dealing with missing values, data reduction, choice of statistical tests, assumptions. Special issues: missing data, mediation and moderation. Feedback on my choice of analytical strategy. A personal perspective: My strengths and challenges as a researcher? Group exercise. Bringing it all together: Overall quality assessment of my research project and design: Strengths, limitations, and what can be done to remedy the limitations? Course evaluation.