

Course literature

UM046FN, Quantitative Methods, Third-cycle level, 7.5 ECTS

credits

Aggarwal, R., & Ranganathan, P. (2017). Common pitfalls in statistical analysis: Linear regression analysis. *Perspectives in Clinical Research*, 8(2), 100–102.
<https://doi.org/10.4103/2229-3485.203040> (3 p.)

Ali, Z., Bhaskar, Sb., & Sudheesh, K. (2019). Descriptive statistics: Measures of central tendency, dispersion, correlation and regression. *Airway*, 2(3), 120–125.
https://doi.org/10.4103/ARWY.ARWY_37_19 (6 p.)

Chyung, S. Y. Y., Barkin, J. R., & Shamsy, J. A. (2018). Evidence-based survey design: The use of negatively worded items in surveys. *Performance Improvement*, 57(3), 16–25.
<https://doi.org/10.1002/pfi.21749> (10 p.)

Cumming, G. (2014). The new statistics: Why and how. *Psychological Science*, 25(1), 7–29.
<https://doi.org/10.1177/0956797613504966> (23 p.)

Khamis, H. (2008). Measures of association: How to choose? *Journal of Diagnostic Medical Sonography*, 24(3), 155–162. <https://doi.org/10.1177/8756479308317006> (8 p.)

Lindblad, S., Pettersson, D., & Popkewitz S., T. (2015). *International comparisons of school results: A systematic review of research on large scale assessments in education*. Vetenskapsrådet (pp. 33–55). <https://www.vr.se/analys/rapporter/vara-rapporter/2015-06-10-international-comparisons-of-school-results.html> (22 p.)

Rumsey, D. J. (2002). Statistical literacy as a goal for introductory statistics courses. *Journal of Statistics Education*, 10(3), 1–12. <https://doi.org/10.1080/10691898.2002.11910678> (12 p.)

Skolverket. (2015). *Provpoängens tillförlitlighet: Om nationella prov*. Skolverket
<https://www.skolverket.se/download/18.6bfaca41169863e6a65b91c/1553966224904/pdf3489.pdf> (40 p.)

Wilson, M. (2023). *Constructing measures: An item response modeling approach* (2nd ed.). Routledge. (pp. 3–38). <https://doi.org/10.4324/9781003286929> (36 p.)



Wilson, M., Bathia, S., Morell, L., Gochyyev, P., Koo, B. W., & Smith, R. (2023). Seeking a better balance between efficiency and interpretability: Comparing the likert response format with the Guttman response format. *Psychological Methods*, 28(6), 1358–1373.

<https://doi.org/10.1037/met0000462> (16 p.)

Wu, M., Tam, H. P., & Jen, T.-H. (2016). What is measurement? In M. Wu, H. P. Tam, & T.-H. Jen (Eds.), *Educational Measurement for Applied Researchers: Theory into Practice* (pp. 1–18). Springer. https://doi.org/10.1007/978-981-10-3302-5_1 (18 p.)

(A total of approximately 200 pages)

Optional literature

Will be chosen and discussed with the teachers of the course.

- About twenty journal papers, within the PhD student's research area, (about 200 pages).
- One dissertation where quantitative research methods are used.

Additional

Relevant literature on register data and Item Response Theory (to be announced during the course).

Referenslitteratur

Kulas, J. T., Prieto Palacios Roji, R. G., & Smith, A. (2021). *IBM SPSS essentials: Managing and analyzing social sciences data*. John Wiley & Sons, Inc. (267 p.)

OECD. (2017). *PISA 2015 technical report*. (pp. 339–342). (4 p.)