

LAB SESSION 12

Outline of lab session:

- follow-up: sample size calc. based on power (12L–12/13/14/15/16/17),
- Minitab review for sample size and power:¹
 - * power and sample size: **Stat-Power** and **Sample Size** menu.
 - * sample size based on precision:
Stat-Power...-Sample Size for Estimation menu.
- individual work on exercises (statistical inference and sample size):
6:99,**107**,38,39,115; 8:33; 7:**127**; 12:35,36; x:**23** (6:103,108,111;
7:129; 8:**103**; **final2020:2**; final2016:1,3),
- summary worksheets for Monday's lab review: S.7:1(d), S.7:2(b,c),
- general time for questions and discussions,
- questions/requests for last lecture? (note: Lecture Theatre A)

Notes and questions for specific exercises:

- 6.38, 6.39, 8.33: sample size based on precision: use formulas/Minitab,
- 6.107: reflect on some of the possible misconceptions (12L–4),
- 6.115, 7.127: sample size based on power: use software,
- 7.129: calculate for $n = 75$ only (and forget about the graph),
- 8.103: (extra) formula for sample size based on precision to compare two proportions,
- x.23: calculate by formulas in lecture (12L–11),
- some exam questions included on varied topics (anova/regression, non-parametric, regression); the 2020 exam was in a different format.

¹ Stata: From Stata 13 onward, use the menu **Statistics-Power and Sample Size**; R: **pwr** library, see solution programs.