

## LAB SESSION 12

### Outline of lab session:

- some follow-up from lecture (12L–13/14/15/16/17),
- Minitab review for sample size and power:<sup>1</sup>
  - \* power and sample size: **Stat-Power** and **Sample Size** menu.
  - \* sample size based on precision:  
**Stat-Power...-Sample Size for Estimation** menu.
- summary worksheet (3:00pm): S.7:1(d), S.7:2(b,c),
- 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; **final2014:3**; final2016:1,3)
- general time for questions and discussions,
- questions/requests for last lecture?

### 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).

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