

# Problem Set Experimental Design

## Question

- (a) A colleague of yours is tasked with designing an experiment in your company. Your task is to help your colleague with the design of the experiment. Your colleague is concerned with the internal validity of the experiment and hence proposes to make use of random treatment assignment. Your colleague asks you whether there are any concerns that threaten internal validity even though treatment assignment was randomized. We discussed three such “third factor threats” in class. Please explain each one and discuss solutions to them.