

## Task B) Plan your experiment analysis (in Teams)

### Purpose of study (Research hypothesis)

Participants try to shoot on a target which has different distances to the participants with a controller. They try to shoot with a crosshair, a laser beam, and both crosshair and laser beam. The further away the target, the bigger the error rate and the more time the participants need. Beam could actually disturb the participants; crosshair should be good enough for aiming.

- **Independent Variable**  
Entfernung der Objekte, Zielloption
- **Dependent Variable**  
Trefferquote/Fehlerrate, Zeit
  - o **Level of measurement (Messniveau der Variablen)**  
Zeit: Rational  
Treffer oder nicht Treffer: Nominal
- **Any further metric which can be analyzed**  
Streuung (Berücksichtigung der genauen Trefferkoordinaten)
- **Suitable test to analyze the data**  
Two-way F-Test  
Jeweils für die Trefferquote und die Zeit.

Grobe Skizze

