

# Fundamentals of Orthopaedic Surgery (FORS) skill table



During the corona-era surgical activity has been halted to a minimum. Thus, the education of orthopaedic residents is limited. We aimed at bettering the educational environment for our junior doctors and Med. students by recreating a refined and extended version of the skill table mentioned in the peer reviewed article: *"A cost-effective junior resident training and assessment simulator for orthopaedic surgical skills via fundamentals of orthopaedic surgery: AAOS exhibit selection"* (<https://pubmed.ncbi.nlm.nih.gov/25878310/>)

The table aims at training the psychomotoric skill-set of aspiring orthopaedic surgeons based on the "FORS"-principle, in an emulated basic surgery environment. A total of 8 skill-stations were build with basic supplies from the local hardware store at a total cost: \$200 (+ a days work).

The table is situated in our conference room and available for training at all hours.

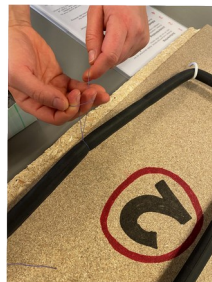
## Station 1: Sutures

Suture technique is trained on different kinds of wounds



## Station 2: Knots #1

Knots by hand are trained on a elastic tube simulating a vessel.



## Station 3: Knots #2

Knots by hand tightened deep. This simulates situations where there is limited space to tighten a knot.



## Station 4: Plunge

This station aims a training to avoid plunging in the tissue when drilling in bone. The green material is porous flower decoration foam, and the depth of plunge is measured after drilling both "cortices" of the plastik pipe.





## Station 5: "Drill by feel"

The wooden board is hidden underneath the foam. The goal is to blindly find the exact middle of the board (red line) by only using the drill for tactile feedback.



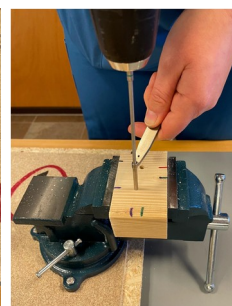
## Station 6: Knots #3

Knots tightened against a lateral force resistance. This mimics situations where a knot has to be tightened by hand with the tissue exerting lateral forces working against the knots.



## Station 7: Lag drilling

The aim is to drill 100% perpendicular to the wooden surface. The entry-point is marked on top by the two colored markings. On the other side there is a correspondingly colored dot marking the optimal exit-point when drilling perfectly perpendicular. This mimics the situation where one has to drill perpendicular to a fracture.



## Station 8: 3D-drilling

The aim is to train spatial understanding when drilling. The colored crosses has correspondingly colored crosses on the opposite site of the wooden block. This trains the three dimensional drilling skills necessary when operating in real life.



## Extra supplies

Extra-supplies are readily available in boxes by the table, and a description of each station is located on the table.

