

Definitions:

Orthotic: Devices that support or correct musculoskeletal deformities / abnormalities of the human body.

Prosthetic: Artificial extension that replaces a missing body part.

Category III: Orthopaedic Technician

Category II: Orthopaedic Technologist

Category I: Orthopaedic Engineer or Orthotist/Prosthetist

Background:

IPRO 309 began in Spring 2006 to help Centro Don Bosco in Bogotá, Colombia, become an accredited Category III program. Up until this semester, various materials have been made to further that goal. Now, the focus has changed from a Category III program to a Category I program.

Objective:

To enhance the current Category I O&P curriculum by making it focus on project based learning, which allows the student to seek the desired knowledge through questioning and hands on experience.

Goals:

To create the necessary materials to aid in the student's learning; i.e. interactive activities, flowcharts, and labs with an emphasis of getting up out of a chair.

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IPRO 309: Orthotic & Prosthetic  
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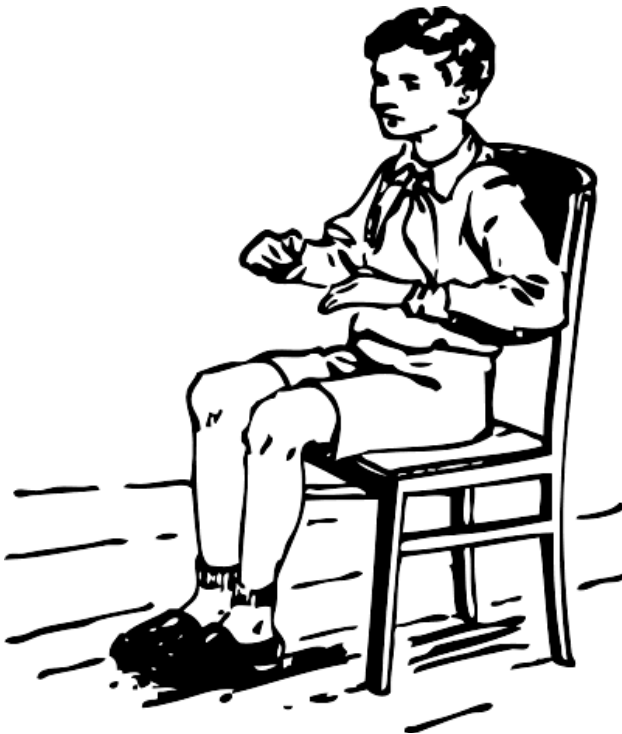
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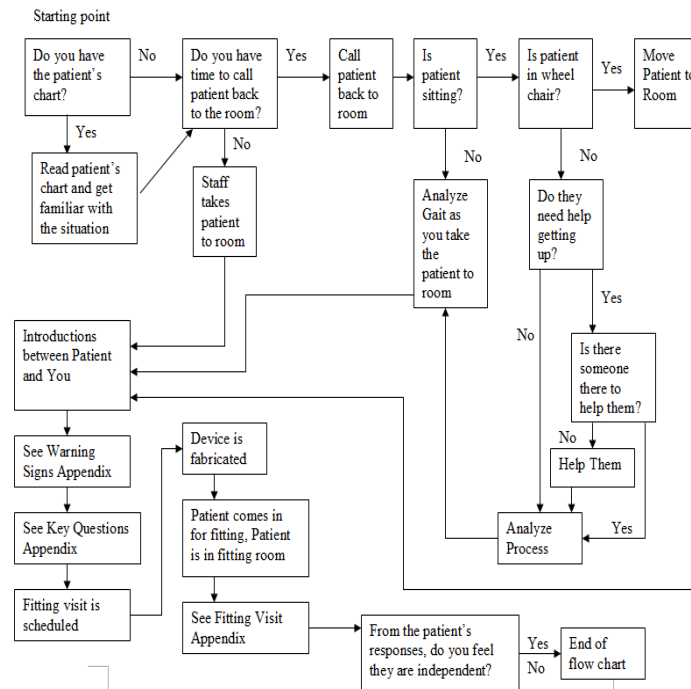
## Curriculum:

- Original: Created an activity focused around getting out of a chair which allows the student to understand:
  - The hazards involved and proper procedure to get out of a chair with and without a disability
- Modified: The activity now includes the patient goals because:
  - The goals include many steps, which may include getting out of a chair
  - It incorporates the other subgroups



## Psychosocial:

- Original: Created a flowchart based around a patient's visit to O&P facility, which includes:
  - Initial analysis of getting out of a chair and gait
  - Warning signs of psychological issues
  - Key questions to ask the patient
  - Fitting and follow up procedures



- Modified: The students will now use the activity to come up with the key questions

## Fabrication:

- Original: Created lesson plans based around the lab sessions to help the student understand:
  - Ductility versus Brittleness
  - Hardness Comparisons
  - Material Elasticity versus Structural Stiffness
  - Developed key questions to accompany lab sessions
- Modified: Based on activity, the students will come up with a recommendation for the device:
  - Type
  - Material
  - Function

