

Midterm Report

IPRO 309- Prosthetics and Orthotics

Education in Latin America and the US

1.0. Revised Objectives

- The primary objectives of the IPRO are to develop educational modules for an ISPO Category Three program. The Category Three program involves training Orthotists and Prosthetists who are able to build much need devices for patients. This program is being implemented in Bogotá, Colombia at Cento Don Bosco High School. We are trying to develop hands-on, interactive sessions that can be used as learning and review material in the subject of the biomechanics of human movements. the group was divided into subteams to cover the topics:

- palpation of anatomical landmarks and orthometry measurements

- range of motion testing and manual muscle testing

- evaluation of sitting and standing posture

- dermatomes, myotomes, reflexes and the spinal cord injuries

- observational gait analysis and use of crutches, canes, and walkers

By the end of the IPRO, each subteam should have developed a highly engaging 2 hour presentation that can be used in the class room setting. These modules may also be used at Joliet Junior College in Illinois, which is developing a similar program.

- By the end of this semester, each member of the team will have the knowledge to perform any of the tests discussed.
- The prepared modules will be presented to an audience of Northwestern University's O&P students, as well as students in the O&P Technician program at Joliet Junior College. This will be to assess the clarity and appropriateness of the materials for our objectives.

2.0. Results to Date

Our first drafts of the educational modules have been submitted and reviewed by the class. This was the culmination of a month's research into clinical biomechanics. Each subteam prepared and presented a 15 minute presentation to the class, which reviewed the modules. This provided invaluable feedback to each subteam on the overall properties of the presentations.

We had a guest speaker, Bryan Malas, director of the O&P Program at Children's Memorial come down and discuss actual cases with us, allowing us to see the integration of the different research groups to each other.

3.0. Revised Task/Event Schedule

There have been no revisions to our tasks. The only addition is a presentation to Northwestern and Joliet Junior College students, tentatively scheduled for the 11th of November.

This planned presentation will also increase our budget by approximately \$600, as we plan on providing catered meals to the reviewers.

4.0. Updated Task Assignments and Designation of Roles

Our team organization has stayed the same.

Alayna George will serve as the IPRO team leader. In her capacity as such, she will be responsible for coordinating and reviewing the activities of the sub teams. In addition, Jared Gardner will act as the International Liaison and Andrew Swantek will act as the IPRO Liaison. Our JJC Liaison is Sandra (Amara) Ogbonnaya. Dr. Meade has agreed to be the Accreditation Expert for our project. Michael Addis is our Public Relations Officer.

The sub teams are defined as follows:

Palpation of Anatomical Landmarks and Orthometry Measurements – Katy Pyles and Michael Addis

Range of Motion Testing and Manual Muscle Testing – Andrew Swantek and Dan Wido

Evaluation of Seated and Standing Posture – Jared Gardner and Amara Ogbonnaya

Dermatomes, Myotomes, and Reflexes and Spinal Cord Injuries – Russell Derrick and Ed Aramayo

Observational Gait Analysis and Use of Crutches, Canes, and Walkers – Julia Northrop and Alayna George

Consisting of only two people each, we do not have defined leaders for each of the sub teams.

Each sub team is responsible for designing and creating a competent, thorough, and pertinent educational module for its assigned topic.

Task assignments for the required IPRO deliverables will be completed by Andy Swantek when we begin to compile our research and prepare for IPRO Day.

Peter Maksimowicz has agreed to be our webmaster for this semester.

5.0. Barriers and Obstacles

After our first presentation drafts were presented, we found that we all faced a problem of how to present to our audience. Specifically, many of the presentations had excessive medical and O&P jargon. We decided to solve this by including a glossary as well as a short presentation of terms that should be reviewed. This will be placed on the website, as well as in the presentation to Northwestern and JJC students in November.