

Midterm Fall 2010

I PRO 309:

Orthotics & Prosthetics Education for Latin
America and the US

Advisor: Professor Meade

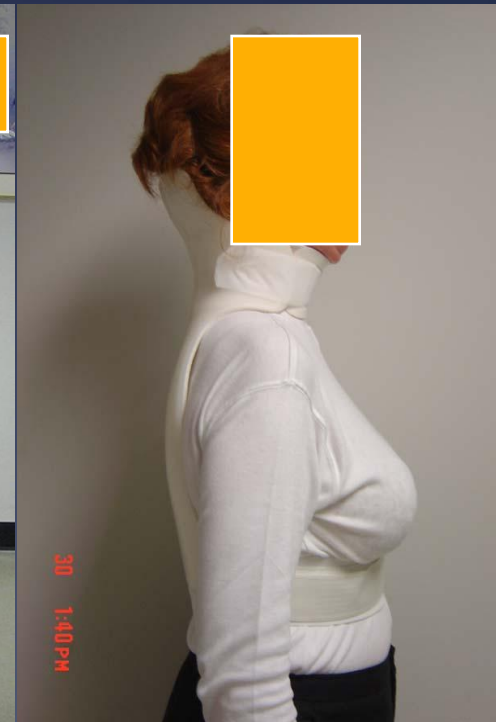


Human Orthotic and Prosthetic Education

Definitions

Prosthesis – An artificial part designed to replace a missing human body part, such as a limb.

Orthosis - A device designed to provide support to ailing, frail or malfunctioning joints and/or muscles.



Definitions - Continued

- * NCOPE – National Commission on Orthotics and Prosthetics Education is the U.S accrediting body for the educational programs for Orthotic and Prosthetic practitioners.
- * ISPO – International Society for Prosthetics and Orthotics is an international organization that contributes to all aspects of prosthetic care, orthotic care, and rehabilitation engineering
 - * Category I – Prosthetist/Orthotist
 - * Category II – Orthopaedic Technologist
 - * Category III – Prosthetic/Orthotic Technician

Retrieved from:
www.ispoint.org
www.ncope.org

Problem Statement

Background

- * Latin America (total population 520 million) has an estimated 2.5 million people in need of orthotic and prosthetic (O&P) treatments
- * Approximately 50 certified & 1500 uncertified O&P practitioners in Latin America

Our Focus

- * Seeking to expand the accessibility of quality O&P education in Latin America

Retrieved from:

- Public Reference Bureau www.prb.org
- ISPO O&P statistics survey in Colombia

I PRO Objectives

- * Design an interdisciplinary team-based capstone course that can be integrated within an existing O&P program
- * Improve patient care by instructing the O&P students in new methods of patient education.

Learning Objectives

- * The course aims to improve students' teamwork performance through hands-on experiences
- * The course provides students with practical information to supplement theoretical information from didactic courses
- * The course emphasizes proper planning and implementation of patient education

Team Organization

The International Society for Orthotics and Prosthetics (ISPO) defined 3 categories of O&P professions: Category I, II, and III

CATEGORY I Prosthetist/Orthotist

Olivia Rovegno

Soha Zahir

Matthew Song

Michael Muller

CATEGORY II Orthopaedic Technologist

Wen Chan

Sydney Williams

Rafael Sosa

Katherine Garczek

CATEGORY III Prosthetic/Orthotic Technician

Alex Luttinen

Jessica Shaw

Krystian Link

Christopher Fistek

Research and Tasks

- * Conduct research on existing O&P curricula through
 - * NCOPE accreditation standards
 - * Schools listed under NCOPE
 - * ISPO category information packages
- * Become familiar with the work of previous IPRO teams.
- * Attend field trips to BioConcepts, Inc. and Children's Memorial Hospital – Learn the process of building an orthotic device through hands-on experience.

Team Organization Cont'd.

- * Meetings:

- * During class time

- * Sub-group meetings outside of class

- * Communication

- * Via iGroups

- * Via email

- * In-person after the end of class

Progress: Syllabus for New Course

- * GOAL: Design an interdisciplinary capstone course model involving all three categories of students: I, II, and III
- * TIME PERIOD: One semester, possibly extending to one academic year
- * HOW: Project-based, hands-on, evaluation and treatment of patients
- * TEAM: At least one student from each ISPO category, certified O&P professionals, patients, physicians, and physical therapists
 - * WHY?- Success highly dependent on

* **Teamwork**

Sub-Group Objectives

- * **Category I** students will participate as full members of the clinical team, take part in examination & prescription, and advise on the design of the prosthetic/orthotic devices.
- * **Category II** students will assist Category I professionals, participate as full members of the clinical team, take part in examination & prescription, and advise on the design of the prosthetic/orthotic device interface.
- * **Category III** students will fabricate O&P devices according to the provided specifications and based on the patient needs.

Retrieved from:
<http://www.ispoint.org>

Course Milestones

Milestone	GOALS
1	<ul style="list-style-type: none">• Form teams• Understand individual professional roles
2	<ul style="list-style-type: none">• Troubleshoot defective devices• Or make improvements and modifications• This serves as Midterm evaluation
3	<ul style="list-style-type: none">• Patient treatment• Instructor supervision• Patient review, instructor rating, peer evaluation• Final report

Major Obstacles Encountered

- * Incorporate individuals' professional interests while maintaining productivity.
- * Become acquainted with team members on a personal level in order to facilitate cooperation.
- * Set a specific goal, i.e., designing a new interdisciplinary team capstone course.

Anticipated Major Challenges

- * Language Barrier: Materials need to be translated between English and Spanish
- * Professional Advice: Insight on current orthotics and prosthetics education is needed from current workers in the field
- * Cohesion of Course: All three O&P categories must be incorporated into an effective, team-based capstone course

Ethical Obstacles and Challenges

- * Proper Patient Evaluation: Students will still be monitored by an O&P professional when treating patients.
- * Informed Consent: Volunteer patients will be evaluated and treated only after having been given informed consent.
- * Institutional Review Board: The ethical implications of such a course will be additionally examined by the IRB.

¿Preguntas?