

University of Iowa 2013-14
165:197 006 International Development
December 27, 2013 - January 18, 2014
Health Sciences and Rehabilitation Medicine in India

Instructor: Prof. H John Yack, PhD, PT, Physical Therapy and Rehabilitation Science (john-yack@uiowa.edu)

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SYLLABUS

Introduction: This course is designed primarily for University of Iowa planning to work in a medical setting, with a professional career emphasis on Rehabilitation Science. Clinical emphasis will be in Orthopaedics, Neurology, Pulmonary, and Cardiac services. This course will require professional interactions with patients and their families, physical therapists, nurses, and physicians on the specialty wards. The International Classification of Functioning, Disability and Health (ICF), developed by the World Health Organization (WHO), will be used to assess how medical impairments result in functional limitations, causing patients to experience disabilities and how they are reflected in their capabilities and performance. Having an understanding of the underlying medical condition and associated functional limitations, students will be expected to explore interventions that have the potential to allow the patient's performance to meet or exceed their capabilities by completing an in depth case study report.

The intent of the course is:

1. For students to gain an understanding of health and health-related states, in the context of India's healthcare system, through interactions with patients and hospital staff, and by using the ICF.
2. Consider the discrepancies between capabilities and performance in the context of environmental issues.
3. Prepare students for the practical issues they will face on a day-to-day basis working in rehabilitation settings.
4. Provide a supportive environment to analyze observations made in clinical settings.

Students who successfully complete this course will be able to meet the following overall objectives:

1. Learn how to administer and analyze an IFC interview form.
2. Explore and develop solutions for improving patient performance.
3. Generate a Case Study report, with in depth analysis of the patient's medical history, treatment, and prognosis, to include interviews with the patient and family, and medical staff.

4. Learn strategies for interacting with patients where communication is difficult.
5. Become more knowledgeable about medical conditions, how they limit function, and result in disability.

About the Instructor: Dr. H. John Yack, PT, has been a member of the faculty of the Department of Physical Therapy and Rehabilitation for the past 18 years and has been the Director the Orthopaedic Gait Analysis Laboratory for the past 12 years. He teaches the Kinesiology and Pathomechanics and Biomechanics in Rehabilitation courses. Research interests include using motion analysis/biomechanics to address rehabilitation issues associated with osteoarthritis and arthroplasty, obesity, and gait retraining.

The Audience: This 3 Semester Hour seminar course is offered to UI students interested in any medical field (social work, physical therapy, occupational therapy, physician assistants, medicine, biomedical engineers, respiratory therapists, speech language pathologists).

UI Participants: This is a 3 S. H. credit seminar course, with course credit through the Department of Health and Human Physiology, for UI undergraduate and graduate students with an interest in working in medical fields, both in national and international contexts. All participants will be under the supervision of Professor Yack for the entire duration, from December 27, 2013 to January 18, 2014. The requirements for receiving 3 semester hours of credit would include hospital/clinical interactions/observations, readings, journal entries, discussions, and seminar participation, in India, and a presentation to students and staff in India. Participation in an Awards Seminar at the University of Iowa during Jan/February of 2014 is optional.

Partner Organizations in India: Our primary partner organization in India will be the Meenakshi Mission Hospital and Research Center (MMHRC), which provides special outreach to the poor. The Meenakshi Mission Hospital has 43 specialties including pediatric oncology, palliative care and hospice, cardio-thoracic and vascular surgery, cardiology, physical medicine and rehabilitation, accidents and emergency care, telemedicine, health camps for poor children, and many others. Our group will work closely with Mr. P. Ganesan, Senior Physical Therapist and the entire staff of the department of physical medicine and rehabilitation (PM & R) at MMHRC.

Partial Bibliography:

- International Classification of Functioning, Disability and Health (ICF) <http://www.who.int/classifications/icf/en/>
Common Language for ICF – Beginners Guide <http://www.who.int/classifications/icf/training/icfbeginnersguide.pdf>
CDC - Classification of Diseases, Functioning, and Disability <http://www.cdc.gov/nchs/icd/icf.htm>
APTA - International Classification of Functioning, Disability and Health (ICF) <http://www.apta.org/ICF/>
Use of the International Classification of Functioning and Disability to Develop Evidence-Based Practice Guidelines for Treatment of:
- o Common Musculoskeletal Conditions <http://www.orthopt.org/ICF.php>

- Children and youth as a roadmap for projecting and programming rehabilitation in a neuropaediatric hospital unit. *J Rehabil Med.* 2010 Jan;42(1):49-55.
- Patients with migraine, myasthenia gravis and Parkinson's disease. *Disabil Rehabil.* 2009;31 Suppl 1:S88-99
- Stroke Survivors An American Heart Association Scientific Statement From the Council on Clinical Cardiology. *Stroke* 2004, 35;1230-40.

For more information:

The India Winterim program application is available on the Study Abroad web site (under the "Application" tab): <http://study-abroad.uiowa.edu/programs/details/index.php?crse=197#application>

The application deadline is **Friday, September 27th at 5:00 PM**. Applications must be submitted in-person to the Study Abroad office's front desk in 1111 UCC.

Contact Professor Prof. H John Yack, PhD, PT, Physical Therapy and Rehabilitation Science (john-yack@uiowa.edu)

For information about financial aid possibilities, go to <http://international.uiowa.edu/study-abroad/financial-aid> and click on either "undergraduate scholarships" or "graduate fellowships."