

**CENTER FOR INTERNATIONAL PROGRAMS**

**Course Name: Physical Therapy and rehabilitation exercises for Common sport injuries**

**Course Code: HHD-1020**

**Total Contact Hours: 48.**

**COURSE DESCRIPTION**

Physical therapy ranks in Costa Rica and the USA as one of the most desirable careers. Physical Therapists play essential roles in today's health care environment. They contribute along with all health care providers to maintain, restore, and improve movement, activity and health, enabling individuals of all ages to have optimal functioning and quality of life.

During this course the student will learn history of Physical Therapy, PT core values and principles, mechanical principles applied to human body, an introduction to exercise therapy, massage therapy and physical therapists approach after a stroke.

**GENERAL OBJETIVE**

Understand the role of the physical therapist within the health care system and have a general idea of biomechanics of human body, exercise therapy techniques and massage therapy.

**SPECIFIC OBJETIVE**

- Understand the action areas of physical therapy within the health care system
- Learn and comprehend the core values and code of ethics for the Physical Therapist.
- Study the mechanical principles of human movement, gait and pathological gait
- Create an understanding base of exercise therapy, relaxation techniques and strengthening exercises.
- Learn the different therapeutic massage techniques and its uses.
- Understand what is a stroke, risk factors, complications and physical rehabilitation.

**AUDIENCE**

This course is structured for International Students attending the Study Abroad program at Universidad Veritas. However, courses are not exclusive to foreigners so a few native student could enroll in this course.

## METHODOLOGY

- Lectures: individual and group analysis of lectures.
- Group investigation to promote investigation methods and group discussion.
- Study of cases to teach the student how to face daily life situations and how the PT intervenes in those cases.
- Hands on practice. Exercise Therapy and Massage therapy certainly has a broad theoretical foundation, however hands on practice is the bread and butter of physical therapists.

## ATTENDANCE

Students are only allowed 2 absences (justified or not). The student will fail the course if he/she has more than 2 absences. Students will have a 0 on any assignment evaluated in class (presentations, evaluations, field trips, etc.) if he/she is absent in this class, unless an official document is presented no later than one week after the absence. In this case the assignment will be due this day. **An unjustified absence to a fieldtrip will immediately mean failing the course.** You can only have two total absences in your elective. Three late arrivals to class (15 minutes later) are treated as one absence. If you tend to be late for class, you will lose 25% of your total grade

## BEHAVIOR

Professors have the right to expel a student from the classroom should he / she:

- 1) Be disruptive in the classroom.
- 2) Behave in a disrespectful way.
- 3) Be under the influence of alcohol or even smell like alcohol.
- 4) Be under the influence of any illegal drug.
- 5) Hygiene problems that may disturb other students.

## ELECTRONIC DEVICES

The use of cell phones, smart phones, or other mobile communication devices is disruptive, and is therefore prohibited during class. **Please turn all devices OFF and put them away when class begins.** Devices may be used ONLY when the professor assigns a specific activity and allows the use of devices for internet search or recording. Those who fail to comply with the rule must leave the classroom for the remainder of the class period.

## EVALUATION SYSTEM

Activity	Total %
Participation	50
Presentation #1	25
Presentation #2	25

## Competencies, criteria and evidence:

At Veritas University competencies are reflexive and integrated actions that respond to the professional profile and to context issues ideally and ethically through the integration of abilities, skills and knowledge. What follows are the discipline and core competencies and their correspondent key competencies and evidence of learning for this course. What follows are the discipline and core competencies and their correspondent key competencies and evidence of learning for this course.

Competencies
<p><b>Examination, Evaluation and Diagnosis</b></p> <p>Consistently integrates the best evidence for practice from all sources of information and utilizes clinical judgment to determine the best care for a patient.</p> <p>Safely examines a patient/client using valid and reliable measures whenever available.</p> <p>Establishes a diagnosis and prognosis for physical therapy, identifies risks of care, and makes appropriate clinical decisions based upon the examination and evaluation, including history, screening and differential diagnosis, and current available evidence.</p> <p>Identifies and considers patient/client goals and expected outcomes.</p> <p>Discusses findings with and obtains consent from the patient/client prior to commencing any physical therapy intervention.</p> <p>When appropriate, refers the patient/client to colleagues or other members of the health care team.</p>
<p><b>Plan of Care</b></p> <p>Establishes and monitors a plan of care in consultation, cooperation and collaboration with the patient/client and other involved health care team members to insure that care is continuous and reliable.</p> <p>Evaluates and updates the plan of care as indicated based on the patient\client status, results of psychometrically valid outcomes measures when available, and applicable laws and regulations.</p> <p>Incorporates appropriate, timely and efficient use of resources (environmental, equipment, care-giver support and financial) when establishing a plan of care.</p>

**Implementation**

Delivers, evaluates and adjusts the physical therapy intervention.

Takes appropriate action in any emergency situation.

Utilizes assistive personnel in accordance with legal requirements.

**Education**

Educates patients/clients, family, and caregivers, using relevant and effective teaching methods to assure optimal patient care outcomes.

**DIDACTIC MATERIAL**

Introduction to Physical Therapy Syllabus that would be given to the students.

Books mentioned in the bibliography.

Videos and other audio visual material.

We will do exercise therapy practice and relaxation hands on practice in a Sports Physical Therapy at the University campus.

**BIBLIOGRAPHY**

- Kinesiology of the Musculoskeletal System, Foundations and Rehabilitation, Second Edition, D. Neumann, 2010.
- The Physiology of the Joints, Sixth edition, Volume one, Upper Limb, A. I. Kapandji, 2005.
- The Physiology of the Joints, Sixth edition, Lower Limb, A. I. Kapandji, 2008
- The Physiology of the Joints, Sixth edition, Volume three, The Spinal, pelvic girdle and head, A. I. Kapandji, 2007.
- Atlas of Human Anatomy, Fifth Edition, F. Netter, MD, 2011.
- Anatomy Trains, Myofascial Meridians for Manual and Movement Therapist, Second Edition, T. Myers, 2009.
- Assessment and Treatment of Muscle Imbalance, The Janda Approach, P. Page, C. Frank, R. Lardner, 2010.
- Clinical Neurodynamics, A new system of musculoskeletal treatment, M. Shacklock, 2010.
- The Trigger Point Therapy Workbook, Third Edition, C. Davies, A. Davies, 2013.

## COURSE PROGRAM

<b>Lesson</b>	<b>Topic</b>	<b>Activities</b>
1	Basic – Physiotherapy, What is Physical Therapy, Physical therapists qualifications, The scope of physical therapist, Ethical responsibilities of physical therapists.	Oral presentation by professor.
2	Basic – Physiotherapy, What is Physical Therapy, Physical therapists qualifications, The scope of physical therapist, Ethical responsibilities of physical therapists.	Oral presentation by professor.
3	Basic – Anatomy, Kinesiology, Biomechanics, Joint movement (ROM), Active movements, Passive movements, Therapeutic Exercises.	Oral presentation by professor.
4	Basic – Anatomy, Kinesiology, Biomechanics, Joint movement (ROM), Active movements, Passive movements, Therapeutic Exercises.	Oral presentation by professor.
5	Student presentation / Manual Therapy, Therapeutic Exercise.	Student / Demonstration and practice
6	Student presentation / Hands on practice, POLD method, Understanding fascia.	Student / Demonstration and practice
7	Student presentation / Joint Movements, Joint mobilizations and elongation.	Student / Demonstration and practice
8	Student presentation / Proprioception (Balance).	Student / Demonstration and practice
9	Student presentation / Trigger Points.	Student / Demonstration and practice
10	Student presentation / Stretching.	Student / Demonstration and practice
11	Student presentation / Kinesiotape.	Student / Demonstration and practice
12	Student presentation / Posture Evaluation.	Student / Demonstration and practice
13	Student presentation / Strength training.	Student / Demonstration and practice
14	Student presentation / McConnell Tape.	Student / Demonstration and practice
15	Student presentation / Functional Training.	Student / Demonstration and practice
16	Student presentation / Climbing tour at Pura Roca.	Student / Demonstration and practice

17	Student presentation / Hydrotherapy.	Student / Demonstration and practice
18	Student presentation / Neurodynamics.	Student / Demonstration and practice
19	Student presentation / Therapeutic Massage.	Student / Demonstration and practice
20	Student presentation / Sports Massage.	Student / Demonstration and practice
21	Student presentation / Relaxation Massage.	Student / Demonstration and practice
22	Student presentation / Ciriax.	Student / Demonstration and practice
23	FIFA Practice.	Student / Demonstration and practice
24	FMS – Functional Movement Screening.	Student / Demonstration and practice