

# Exercise Essentials In Rehabilitation

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## Course Introduction

The power of the Word:

Exercise is defined as a noun by:

- activity requiring physical effort, carried out to sustain or improve health and fitness
- a process or activity carried out for a specific purpose, especially one concerned with a specified area or skill

Essential is defined as a noun by:

- a thing that is absolutely necessary

With these definitions in mind; this course is designed to challenge the participants to consider all aspects of physical therapy and sport science to determine what is absolutely necessary when prescribing an exercise aimed at improving the health or fitness of our clients. The goal will be to expand the participants' understanding of what is necessary to consider when prescribing exercise. The participants will be challenged to consider the many different components of kinesiology, pathology and performance to develop an appropriate prescription that meets the goal of "essential".

The desired outcome of this course is to empower participants to be able to better understand their knowledge base and limitations; and then to challenge them to determine their own path of science integration into their exercise prescription practices.

## General Outline:

Friday:

Friday night will be like our first date: let's get to know each other and all get on the same page. The goal will be to come up with the common language and desired outcome goals for our clients to better understand how we will develop our "Exercise Essentials" on Saturday and Sunday.

- Human's treating humans
- "Why Now": from subjective history to objective assessment to the identification of problems to the creation of a plan of care and a treatment timeline based on the clients WHY
- The best of the best are the best at the basics:
  - do you have good habits or are you a good actor
- 360 degrees of performance - the jenga blocks of performance
  - Central governance - compensation/decompensation
  - Stress - Rest and Adaptation - maintaining homeostasis

**Saturday/Sunday:**

**Saturday/Sunday will be 2 days of interactive case based challenges to focus the participants to consider what are the “Exercise Essentials” for XX different clinical performance based activities.**

**Theory Component:**

- **A man named Newton - what have we learnt and what do we forget to think about**
- **Gravity is a big fast force**
- **Force, Velocity, Impulse, Power**
- **Linear and Rotational components ... is that a tangent**
- **Movement from Rood to Janda to Saharmann to Cook to you: what are your beliefs**
- **ATP - how do we get it working and keep it working ... or do we even need it**
- **Do we really need to learn how to breathe - is it not just sucking and blowing**
- **This thing called “CORE”**

## **Clinical performance based activities/conditions**

**Running:**

**Sprinting to Marathons - what are the exercise essentials?  
Is running even a skill and if so what are it's drills**

**ACL Injuries:**

**What are your timelines and fundamental milestones and exercise essentials?  
When do you know your rehab is complete?  
Where do you start your treatment for a knee problem - is pre-surgical prep valued**

**Overhead Throwing/Hitting**

**What is the major difference between these  
Where does it all begin  
Where do you start your treatment for a shoulder problem**

**Jumps and Hops/Bounds/Skips**

**Do I know the difference**

**Speed - Quickness - Agility/Dexterity**

**What is speed  
What do I mean when I say quickness  
What is Agility and Dexterity**