Queen's University
School of Kinesiology and Health Studies

Course Name: **KNPE 459/3.0** Clinical Exercise Physiology **Not Offered in 2020-2021**	**Course Instructor:** Kyra Pyke	**Contact Hours:** Lectures: 2 x 1.5 hrs/wk / 12 weeks Labs: 1 x 2 hrs/wk **Prerequisite:** KNPE 125/3.0, KNPE 225/3.0, KNPE 227/3.0 Level 3 or above in a KINE or PHED plan. **Exclusion:**

Course Description:

This course explores the role of exercise in the prevention, diagnosis and treatment of various clinical conditions. Emphasis is placed on integrating an understanding of exercise physiology and disease pathophysiology to examine evidence relating to exercise interventions.

Course Texts:

Readings assigned by topic.

Postings on OnQ.

Course Objectives:

By the end of this course you should be able to:

- Identify and describe the nature and significance of particular clinical issues when examining examples of physiological data
- Explain the pathophysiology of selected clinical conditions and the impact of the condition on the acute exercise response
- Interpret and discuss evidence regarding the potential benefit of exercise in relation to selected clinical conditions
- Communicate a summary and interpretation of published research findings and present an evidence based novel research proposal related to the benefits of exercise training in a clinical population of your choice.

Course Evaluation:

Term Test #1	25%
Term Test #2	25%
Term Test #3	20%
Assignment	30%

Course Outline

Risk benefit analysis	COPD - Pathophysiology
ECG Interpretation	Chronic obstructive pulmonary disease
Exercise testing and assignment discussion	Diabetes
Atherosclerosis and endothelial function	CAD and MI – Mechanisms of exercise benefit
Osteoporosis	Benefits of exercise vs. angioplasty

Heart failure - Pathophysiology	

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