**Course Name:**
KNPE 425/3.0

**Course Instructor:**
Dr. Kyra Pyke

**Contact Hours:**
Lectures: 2 x 1.5 hrs / 12 weeks

**Prerequisite:**
KNPE 225/3.0 and KNPE 227/3.0
Level 4 or above in a KINE or PHED Plan.

**Exclusion:**
KNPE 493/3.0-001 Topic ID Stress Physiology (Offered winter 2016)

**Course Description:**
An in-depth exploration of physiological responses to primarily psychological sources of stress. An emphasis is placed on understanding the interaction between stress responses and function/health.

**Course Texts:**
Resources will be posted on OnQ.

**Intended Student Learning Outcomes:**
- Describe stress, physiological stress response activation and its short and long term consequences in order to support advanced discussion
- Apply an understanding of physiological stress responses to explain mechanisms by which stress can influence function and health
- Describe the nature and physiological impact of selected stress management strategies to explain potential value as interventions
- Interpret and evaluate and present research related to stress physiology to discuss evidence, generate hypotheses, answer questions and demonstrate communication skills.

**Course Evaluation:**
Term tests (3) 55%
Research Assignment 27%
Quizzes (18) 18%
(lowest two marks will be dropped)

**Course Outline**

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<th>The physiological stress response</th>
<th>Acute stress and endothelial function – variability and conclusions</th>
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<td>The physiological stress response and stimulating responses in the lab</td>
<td>Impact of acute exercise on stress reactivity</td>
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<td>Acute stress reactivity and CV health</td>
<td>Chronic stress – evidence regarding the influence on cardiovascular health</td>
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<tr>
<td>Acute stress and endothelial function</td>
<td>Occupational stress – assessment and findings</td>
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<td>Acute stress and endothelial function-mechanisms-SNA</td>
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<td>Acute stress and endothelial function – mechanisms – cortisol and ET-1</td>
<td>Stressful life events and depression</td>
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