

BODY TEMPERATURE CONTROL AND PHYSICAL ACTIVITY (CODE 2024037)

COURSE SYLLABUS:

The purpose of this course is to discuss, through critical analysis of relevant articles, the acute and chronic physical exercise on the control of internal body temperature, and its interference in performance.

GOALS:

The student should be able to understand and rationalize about:

- internal body temperature control mechanisms;
- the regulation of internal body temperature during physical exercise;
- thermal and non-thermal factors related to heat dissipation during exercise;
- the relation between thermal stress and cardiovascular function during exercise;
- the effects of the intensity and duration of the exercise on thermoregulation;
- the neural responses involved with thermoregulation during physical exercise;
- the trigger mechanisms of hyperthermic fatigue;
- the dynamic and static flags of hyperthermic fatigue;
- the effects of physical training on thermoregulation.

BIBLIOGRAPHY:

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- GISOLFI, C. V.; MORA, F. The Hot Brain Survival, Temperature, and the Human Body. The MIT Press, Cambridge, MA, 2000.
- MARINO, F. E. Thermoregulation and Human Performance - Physiological and Biological Aspects. S Karger AG, Basel, Switzerland, 2008.
- McARDLE, W.D.; KATCH, F.I.; KATCH & V.L. Fisiologia do Exercício – Energia, Nutrição e Desempenho Humano. 5ª ed. Rio de Janeiro: Guanabara Koogan, 2003.