



Conteúdo Programático de Componente Curricular

Componente Curricular:	Introduction to Systematic Reviews and Meta-Analysis of Interventions			Código:	FIS0027	
Tipo de Componente:	() Atividade () Disciplina (X) Módulo					
Nível:	(X) Mestrado () Doutorado			Obrigatória:	Não	
Créditos:	01	Carga Horária Teórica:	16h	Carga Horária Prática:	0h	
Área de Concentração:	Avaliação e Intervenção Fisioterapêutica e Aspectos Funcionais					
Docente Responsável:	Magno Markus Ferreira Formiga Gonçalves de Oliveira e Rafael Barreto de Mesquita					
Justificativa:						
The proposed course is a crucial step towards internationalization and enhancing the program's current standing. Systematic reviews and meta-analysis are cornerstone methodologies in evidence-based healthcare, widely recognized and employed worldwide. By offering this course fully in English, we not only provide students with essential skills for developing robust research but also improve their English language proficiency, an important asset for disseminating research findings and engaging in international academic discourse. The proposed course aligns with the broader goals of academic excellence, research dissemination, and preparing our students for potential international collaborations.						
Objetivos:						
Objetivo Geral: Understand the role of systematic reviews and meta-analyses in healthcare; Explain the essential steps of conducting a systematic review and meta-analysis.						
Objetivos Específicos: Formulate a specific study question and define inclusion and exclusion criteria; Conduct an electronic search using the appropriate terms in different databases; Gain familiarity with tools for assessing risk of bias in randomized controlled trials; Run basic analyses and interpret the output; Appraise the quality of a systematic review; Assess the quality of evidence using the GRADE system; Describe the challenges associated with performing and interpreting systematic reviews.						
Ementa:						



Overview of the concepts necessary for performing systematic reviews and meta-analysis of interventional studies. Step-by-step instruction in how to conduct systematic reviews and meta-analysis, including different aspects (e.g. developing literature search strategies, data extraction and management, and statistical methods for meta-analysis). Additional topics will also be covered (e.g. choosing a meta-analytic method, study quality assessment, presentation of results).

Programa:

Class 1 - Introduction to Systematic Reviews

- In-class small group exercise (25%)

Class 2 - Conducting and Reporting Systematic Reviews

Class 3 - Searching and Selecting Studies

- In-class small group exercise (25%)

- Due: Homework assignment 1 (25%)

Class 4 - Collecting Data and Effect Measures (part 1)

Class 5 - Collecting Data and Effect Measures (part 2)

Class 6 - Preparing for Synthesis and Meta-Analyses

Class 7 - Risk of Bias in Randomized Trials, Certainty of the Evidence

Class 8 - In-class Small Group Presentations

- In-class small group 10-minute presentations, followed by 10-minute discussions (25%)

Forma de avaliação:

Grades will be based on points accumulated on four assignments. There will be a total of 100 total possible points, distributed as follows:

- *In-class small-group exercise 1 (25%):* Students will be instructed to formulate a research question in small groups, look for ways to refine the questions and present their questions and report any difficulties to the whole class.

- *Homework Assignment 1 (25%):* Students should read chapter 2 of the Cochrane Handbook; refine the study question that they have chosen for the course; develop their inclusion/exclusion criteria; do a quick search on the Cochrane Database of Systematic Reviews to check if a systematic review or protocol on their topic has already published; download RevMan; hand in a printout of their study question and inclusion/exclusion criteria (i.e., complete all the sections in RevMan up to "Search methods for identification of studies").

- *In-class small-group exercise 2 (25%):* Students will be instructed to generate a short list of keywords and subject headings in small groups to use in their search, combining the terms with the appropriate Boolean operators.

- *In-class small-group presentation (25%):* Students should present the methods of their planned study using PRISMA guidelines, including eligibility criteria, information sources, search strategy, selection process, data collection and synthesis processes.



To pass the course, a minimum score of 50% (i.e., a grade equal to or higher than 5.0 points) and at least 75% attendance is required.

Bibliografia:

1. Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA (editors). Cochrane Handbook for Systematic Reviews of Interventions version 6.4 (updated August 2023). Cochrane, 2023. Available from <https://training.cochrane.org/handbook>
2. Guyatt, G. H., Oxman, A. D., Kunz, R., Atkins, D., Brozek, J., Vist, G., Alderson, P., Glasziou, P., Falck-Ytter, Y., & Schünemann, H. J. (2011). GRADE guidelines: 2. Framing the question and deciding on important outcomes. *Journal of clinical epidemiology*, 64(4), 395–400. <https://doi.org/10.1016/j.jclinepi.2010.09.012>
3. Sterne, J. A. C., Savović, J., Page, M. J., Elbers, R. G., Blencowe, N. S., Boutron, I., Cates, C. J., Cheng, H. Y., Corbett, M. S., Eldridge, S. M., Emberson, J. R., Hernán, M. A., Hopewell, S., Hróbjartsson, A., Junqueira, D. R., Jüni, P., Kirkham, J. J., Lasserson, T., Li, T., McAleenan, A., ... Higgins, J. P. T. (2019). RoB 2: a revised tool for assessing risk of bias in randomised trials. *BMJ (Clinical research ed.)*, 366, l4898. <https://doi.org/10.1136/bmj.l4898>.

*Anualmente as referências serão revisadas e atualizadas