Concentration area: 5150

Creation: 20/12/2016

Activation: 20/12/2016

Credits: 6

Workload:

<table>
<thead>
<tr>
<th>Theory (weekly)</th>
<th>Practice (weekly)</th>
<th>Study (weekly)</th>
<th>Duration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>6</td>
<td>9 weeks</td>
<td>90 hours</td>
</tr>
</tbody>
</table>

Professors:

André Luiz Pereira de Albuquerque

Juliana Carvalho Ferreira

Rogério de Souza

Objectives:

To present the students who are entering the post-graduation program to the basic concepts for planning, execution and interpretation of the results of research projects. Students should present their doctoral projects at the beginning of the course, and weekly discussions of the concepts addressed in each class will be directed to its application to student’s projects. At the end of the course, students present their projects, incorporating modifications resulting from these discussions.

Rationale:

Understanding the concepts necessary for the design of a research project is essential for graduate students. In this course, we will discuss the most relevant topics for the development of a feasible original project, with potential to receive funding from Brazilian development agencies. In addition, we will discuss important aspects for data collection and analysis, as well as practical aspects of project submission to ethics committees, and ethical considerations.

Content:

WEEK 1 10:00 -11:00 Introduction: course objectives and goals 11:00-12:00 Presentation of student protocols and discussion; WEEK 2 10:00-11:00 Study design I: Transversal, case control, Prospective and retrospective cohort 11:00-12:00 Study design II: Clinical trials, Surveys, Diagnostic tests; WEEK 3 10:00-11:00 Study question 11:00-12:00 Study population: inclusion criteria and Exclusion, recruitment, adherence, internal and external validity; WEEK 4 10:00-11:00 Research project development I: project elements (introduction, hypothesis objective, methods, schedule, budget, etc.) 11:00-12:00 Development of the research project II: submission to research and ethics committees, Plataforma Brasil, public registry of clinical trials, funding sources; WEEK 5 10:00-11:00 Data collection: accuracy, precision, quality control, database; 11:00-12:00 Sources of error:
chance, bias, confusion, effect modification; WEEK 6 10:00-11:00 Sample size Calculation;
11:00-12:00 Planning of data analysis: statistical planning, Interim analysis; WEEK 7 10:00–
11:00 Ethical aspects 11:00-12:00 Bibliography: Bibliographic search and bibliographic references; WEEK 8 10:00-12:00 Presentation of projects and final evaluation.

**Type of Assessment:**

Participação em classe e apresentação do projeto de pesquisa ao final do curso

**Bibliography:**


**Languages taught:**

English