

Department of Epidemiology

MASTER'S THESIS PROPOSAL GUIDELINES

Target length: 3-5 single-spaced pages (including references) in **Arial 11 point font**, plus any figures or tables.

I. Title Page: Project title, student's name, chair of committee, committee members, and date. Create a space on the title page for committee signatures, obtain signatures from all committee members on the title page, and upload the proposal to the Epi Students Canvas site.

II. Specific Aims: List the project's immediate goals in terms of hypotheses to be tested or research questions to be answered. If desired, the overall purpose of this line of investigation may be mentioned, in order to indicate the long-term importance of the specific information being sought through this study. This section should not exceed ½ page in length and may be much shorter.

III. Background and Significance: Describe the scientific context for the study, briefly summarizing previous related research. *This should NOT be an extensive literature review.* Keep references to a minimum by citing only those that are most relevant. This section should identify the gaps in knowledge which the proposed project will help to fill. *It should not exceed 1 page in length.*

IV. Methods: The format of this section may be tailored to meet the needs of the specific study being proposed. However, the following sub-headings usually apply, and their use is encouraged. This should be the longest section of the proposal, usually 2-3 pages in length.

1. **Study design:** Define a) the study design, b) the primary exposures to be evaluated (or interventions to be implemented), c) how the primary exposures would be assessed and quantified (if applicable), d) outcomes to be assessed and their definition, and e) the key covariates and their definition.
2. **Study setting:** Describe the location, organizational context, clinical site(s), or other setting in which the research would take place.
3. **Study subjects:** Indicate the source(s) of study subjects, criteria for eligibility, and the anticipated number to be studied.
4. **Data collection:** Describe the sources of key data items. When applicable, the sequence of data collection activities for a typical subject should be given. A diagram can be helpful when data will come from several sources or when multiple observations over time are to be obtained. If there are plans to monitor and assure data quality (such as duplicate data for some or all subjects, cross-checks of one data source against another), describe them briefly.

5. Data analysis: Describe how the data will be organized to address each of the specific aims and/or hypotheses mentioned in section A. Specify the statistical techniques to be used. Dummy tables or figures may be helpful.
6. Study Power: Summarize the results of statistical power or sample-size calculations.

V. **Limitations**: Describe any limitations that are beyond your control (e.g., that have already been decided upon or implemented) that may affect the ability to test adequately the primary hypotheses, or that may influence your interpretation of the study results.

VI. **Timeline**: Provide an approximate timeline for completion of the project.

VII. **References**: Provide citations to key literature references used in the proposal.