

Checklist for ACE proposals

Students: this form should be distributed to each of the three Special Committee members along with your final draft of the written ACE. The completed form can be collected from committee members after one week.

If the Special Committee members designate “yes” (for acceptability) in each of the first six (6) categories, the oral ACE can be scheduled in the following 1-2 weeks, and the written portion of the ACE is distributed to the fourth member of the Examining Committee and ACE Chairperson.

If the written is not correctly prepared; i.e., there are checks under the “no” column, the student must revise the proposal, indicating where changes have been made. This revised proposal is then distributed to the entire Examining Committee (along with copies of the checklist from the first submission), and the oral ACE can be scheduled in the following 1-2 weeks. The first charge of the Examining Committee during the oral ACE is to determine the suitability of the revisions made by the student.

Yes No

1. Overall appearance and format

- Is the title clear and appropriate?
- Is the proposal free of typographical, spelling, and grammatical errors?
- Are the references in a uniform format with full titles (The preferred format is the one used in *Cell*)? Is information in the proposal cited appropriately?
- Is the writing, in general, simple, concise and readable?
- Are the paragraphs organized and do they display an underlying logical thought process?
- Are basic principles of technical writing followed with appropriate use and formatting of headings and subheadings?
- Is the proposal 15 pages or less (including figures but excluding references).
- Are figures included to aid the narrative? Are they appropriately referred to in the text and adequately explained in the legends?

2. Specific Aims

- Are the Specific Aims clearly stated at the beginning of the proposal?
- Is there a central hypothesis? Is it explicitly stated? Is it testable?
- Are the Aims related to each other and are they presented with a logical flow?
- Are the specific aims, in general, of sufficient complexity and depth for an ACE proposal?
- Are the Aims expressed as “headlines” with a brief expansion following each one?

- 3. Background and Significance**
- Is there a section devoted to background?
 - Is the Background section divided into separate topics using subheadings?
 - Does the background display a sufficient knowledge base? Is the background devoid of extraneous unrelated information?
 - Is there a proposed model, describing the field and identifying questions that require investigation?
 - Has the student presented a rationale that justifies exploration of these questions? Does the student present a reason why these experiments should be done?
- 4. Experimental Design and Methods-Format**
- Is there an Experimental Design section?
 - Is this section subdivided as defined by the Specific Aims? Are these Specific Aims identical to those in the Specific Aims section?
 - Are the individual sections divided into sub-Aims?
- 5. Experimental Design and Methods-Rationale and Approaches**
- Is a rationale provided for each Aim?
 - Does the proposal describe ways to interpret the data obtained?
 - Does the proposal include alternate approaches in case the proposed methods fail? (Only a few alternate approaches are required for a “Yes”).
- 6. Specific Aims for the student’s proposed thesis research**
- Students should provide their special committee with a one-page summary of their current research using the Specific Aims format. Upon passing the oral defense, they should schedule their first annual committee meeting to discuss the suitability of their thesis project.

The following aspects of the ACE Proposal will be examined during the Oral defense.

7. Choice of Topic, Aims, and Approaches

- Is the central hypothesis reasonable and generated from a logical assessment of the background data?
- Are the approaches to each Aim and sub-Aim, in general, reasonable? (The appropriateness of the chosen approaches may be a topic of discussion during the oral part of the ACE exam). Are the approaches of sufficient depth, complexity, and thoroughness for the ACE proposal?
- Are the experiments of the proposal founded in a solid rationale?
- Do the proposed experiments address the central hypothesis?
- Will the results of the proposed experiments be capable of addressing the central hypothesis?