**Appendix 6. Expanded program learning outcome statements**

It is useful for students to understand faculty expectations for program learning outcome chosen by the faculty. One means to achieve understanding is by providing students with clear statements of superior performance for each outcome. Examples of such statements are listed below for the following outcomes:

1. Professional development
2. Effective researcher
3. Critical thinking
4. Close reading of texts
5. Writing
6. **Professional development**

Objective

To enable students to develop as successful professionals for highly competitive positions in industry, government, and academic departments, the program aims to provide a variety of experiences that help students to:

Outcomes

a. achieve the highest level of expertise in XXXX, mastery of the knowledge in their fields and the ability to apply associated technologies to novel and emerging problems

b. present research to local, regional, national, and international audiences through publications in professional journals and conference papers given in a range of venues, from graduate seminars to professional meetings

c. participate in professional organizations, becoming members and attending meetings

d. broaden their professional foundations through activities such as teaching, internships, fellowships, and grant applications

1. **Effective Researchers**

Objective

To prepare students to conduct research effectively in XXXX in a collaborative environment, the program aims to offer a variety of educational experiences that are designed to develop in students the ability to:

Outcomes

a. read and review the literature in an area of study in such a way that reveals a comprehensive understanding of the literature

b. identify research questions/problems that are pertinent to a field of study and provide a focus for making a significant contribution to the field

c. gather, organize, analyze, and report data using a conceptual framework appropriate to the research question and the field of study

d. interpret research results in a way that adds to the understanding of the field of study and relates the findings to teaching and learning in science

**C. Critical thinking**

Objective

To prepare students to comprehensively explore issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

Outcomes

1. Explanation of issues- Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding.

1. Evidence- Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.
2. Influence of context and assumptions- Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.
3. Position- Specific position (perspective, thesis/hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).
4. Conclusions- Conclusions and related outcomes (consequences and implications) are logical and reflect student’s informed evaluation and ability to place evidence and perspectives discussed in priority order.

1. **Close reading of texts**

Objective

To prepare students in close reading of texts.

Outcomes

1. Comprehension- Recognizes possible implications of the text for contexts, perspectives, or issues beyond the assigned task within the classroom or beyond the author’s explicit message (e.g., might recognize broader issues at play, or might pose challenges to the author’s message and presentation).
2. Genres - Uses ability to identify texts within and across genres, monitoring and adjusting reading strategies and expectations based on generic nuances of particular texts.
3. Relationship to text- Evaluates texts for scholarly significance and relevance within and across the various disciplines, evaluating them according to their contributions and consequences.
4. Analysis- Evaluates strategies for relating ideas, text structure, or other textual features in order to build knowledge or insight within and across texts and disciplines.
5. Interpretation- Provides evidence not only that s/he can read by using an appropriate epistemological lens but that s/he can also engage in reading as part of a continuing dialogue within and beyond a discipline or a community of readers.
6. Reader’s voice- Discusses texts with an independent intellectual and ethical disposition so as to further or maintain disciplinary conversations.
7. **Writing**

Objective

To prepare students in the development and expression of ideas in writing in the discipline.

Outcomes

1. Context and purpose- Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.
2. Content development- Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.
3. Genre and disciplinary conventions- Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including  organization, content, presentation, formatting, and stylistic choices
4. Sources and evidence- Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing
5. Control of syntax and mechanics- Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.