COMP350 Course Competencies

Knowledge Areas

- 1. SEP/Social Context
- 2. SEP/History
- 3. SEP/Professional Ethics
- 4. SEP/Professional Communication

Professional Dispositions

- **Meticulousness**: Attention to detail is essential when evaluating research literature.
- **Self-Directed:** Become self-motivated to investigate a paper and the social and technical context from which it came.
- Perseverance: Readers often will encounter new and unfamiliar material when evaluating research papers. It is important to develop habits and practices to work through or around that uncertainty.
- **Responsible:** As part of a research group, you will be relied upon to do you part and be prepared to meet deadlines. Moreover, you have the responsibility to represent other's work as fairly and accurately as you're able.

Skill's Hierarchy

- **1. Explain** define, describe, discuss, enumerate, express, identify, indicate, list, name, select, state, summarize, tabulate, translate
- **2. Apply -** backup, calculate, compute, configure, debug, experiment, install, iterate, interpret, manipulate, map, measure, predict, randomize, restore, schedule, solve, test, trace
- **3. Evaluate** analyze, compare, classify, contrast, distinguish, categorize, differentiate, discriminate, order, prioritize, criticize, support, assess, choose, defend, rank
- **4. Develop** combine, compile, compose, create, design, generalize, integrate, modify, organize, produce, rewrite, refactor, write

Competencies

1. Task: Evaluate and present a summary of a research paper.

- a. Competency: Read a research paper, glean essential details, and prepare a written or oral report about the paper's results.
- b. Required Knowledge: SEP/Social Context, SEP/History, SEP/Professional Ethics, SEP/Professional Communication
- c. Required Skill: Explain/Apply/Evaluate

2. Task: Identify key research from an area or designated body of work.

- a. *Competency*: Read and evaluate a set of papers in order to find key, influential works within that set.
- b. Required Knowledge: SEP/Social Context, SEP/History ,SEP/Professional Ethics, SEP/Professional Communication
- c. Required Skill: Explain/Evaluate

3. Task: Carry out a review of research literature and report your findings to fellow researchers.

- a. Competency: Seek out and evaluate research on a given topic or with a given focus, identify important work within that focus, document your findings, and report them to a group of researchers.
- b. *Required Knowledge*: SEP/Social Context, SEP/History ,SEP/Professional Ethics, SEP/Professional Communication
- c. Required Skill: Explain/Evaluate/Develop

4. Task: Present computing research to a non-technical audience.

- a. Competency: Evaluate one or more pieces of computing research and develop a general audience presentation (written or oral) of its importance and the context from which it came.
- b. Required Knowledge: SEP/Social Context, SEP/History ,SEP/Professional Ethics, SEP/Professional Communication
- c. Required Skill: Explain/Evaluate/Develop