

## Master of Science Final Comprehensive Exam (Defense) Scoring Rubric

### 1. Identification and Articulation of the Problem

**Unacceptable** - Presentation fails to adequately describe aims / objectives and provide relevance to existing bodies of knowledge; rationale for aims / objectives is absent or weak

**Acceptable** – Aims / objectives are presented; flaws in scope may be present; relevance to existing knowledge is described and an acceptable rationale for aims / objectives is presented

**Very Good** - Aims / objectives are clearly and succinctly presented; aims are appropriate in scope; a rationale for the aims / objectives is presented

**Outstanding** - Aims / objectives are structured to provide a logical framework to address the problem providing evidence of a thorough analysis of the existing bodies of knowledge; a compelling rationale for the aims / objectives is presented

### 2. Expression of Background / Existing Information

**Unacceptable** - Weak or inappropriate information related to problem/question is presented; lack of appropriate citations

**Acceptable** – Appropriate information related to problem / question is presented with appropriate citations

**Very Good** - Information presented related to problem / question displays expanded scope and relevance

**Outstanding** - Information presented displays expanded scope and relevance and is organized to enhance response to the problem / question presented showing evidence of a critique of prior work on the problem

### 3. Presentation, Assessment and Analysis of Supporting Evidence

**Unacceptable** - Confused presentation of information and evidence in support of proposal / presentation

**Acceptable** – Organization of evidence and analysis is generally clear but may contain flaws

**Very Good** - Organization of evidence and analysis reflects clear relationships of information supporting proposal / presentation

**Outstanding** – Organization of evidence and analysis is exceptionally clear in showing relationships of information supporting proposal / presentation including an indication of the

relative importance of components of the evidence presented; critical assessment of existing information is evident

#### **4. Develops, Communicates and Explains Project Plan**

**Unacceptable** - Expression of relationship of project plan to aims / objectives is weak or inappropriate; relation of plan in support of elements of hypothesis is flawed

**Acceptable** - Project plan addresses aims / objectives is appropriate; elements of project plan may be flawed with respect to the strength of data acquisition supporting elements of hypothesis

**Very Good** - Project plan presentation clearly addresses aims and objectives; components of plan related to elements of hypothesis are logically presented with specific identification of the basis for selection of approaches

**Outstanding** – Project plan presentation displays evidence of creative approaches to meet the aims / objectives including the selection and justification of components of the plan; the framework of the project presented provides a logical and convincing approach; alternative approaches may be presented

#### **5. Displays Mastery of Subject Matter**

**Unacceptable** - Student demonstrates knowledge of factual material limited to a level appropriate to a baccalaureate graduate in the sciences; knowledge of bioscience related to the student's research area is unrelated to the current research literature

**Acceptable** - Student demonstrates advanced knowledge of factual material consistent with graduate level training; displays an awareness of the research literature in the student's research area

**Very Good** - Student demonstrates ability to apply fundamental and advanced concepts to topics in bioscience and ability to relate the current research literature to her or his area of research

**Outstanding** - Student demonstrates ability to apply fundamental concepts to advanced topics in bioscience and a command of the current research literature related to her or his area of research; evidence of critical assessment and synthesis of elements of bioscience is apparent

#### **6. Addresses Questions Appropriately**

**Unacceptable** – Limited awareness of expectations of examiner; consistently fails to be appropriately responsive independently; structure of responses weak and/or difficult to follow

**Acceptable** - Generally aware of expectations of examiner; generally independently responsive to questions with occasional prompting or “leading” required; structure of responses adequate; some clarification / expansion of answers may be required

**Very Good** - Aware of expectations of examiner; seeks clarification if warranted; independently responsive to questions with limited need for prompts; structure of responses provides evidence of reflective organization of information

**Outstanding** - Displays informed awareness of expectations of examiner; independently responsive to questions; structure and breadth of content of responses provides evidence of reflective and creative organization of information; evidence of creative synthesis of information suggested / related to questions

#### **7. Demonstrates Ability to Synthesize Information Creatively**

**Unacceptable** - Confused presentation of information and evidence in support of answer(s)

**Acceptable** – Organization of evidence and analysis is generally clear but may contain flaws

**Very Good** - Organization of evidence and analysis reflects clear relationships of information supporting response

**Outstanding** – Organization of evidence and analysis is exceptionally clear in showing relationships of information supporting response including an indication of the relative importance of components of the evidence presented and a critical assessment / analysis of the validity of the information.

*Revised 6/2011 CJL*