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|  | Specialized Master of Science Evaluation of Research Proposal  |

***IMPORTANT:*** A copy of the research proposal must be attached.

**Student Name:** **Discipline:**

**EMPL ID:**       **Date of presentation:**

**Working Title of Internship Practicum Report:**

**Evaluation by the Committee:**

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| --- | --- | --- | --- |
| **Competencies/Student Learning Outcomes (Detailed Description of Scoring Rubric on attached page)** | **Does Not Meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Biomedical Scientific Knowledge** |  |  |  |
| Demonstrates knowledge in the biomedical, translational, and/or clinical sciences | [ ]  | [ ]  | [ ]  |
| Critically analyzes and evaluates literature in the biomedical sciences to discover and implement new knowledge and skills | [ ]  | [ ]  | [ ]  |
| Demonstrates advanced understanding of a range of technical and conceptual approaches used in biomedical sciences research | [ ]  | [ ]  | [ ]  |
| **Communication Skills** |  |  |  |
| Demonstrates effective written communication skills | [ ]  | [ ]  | [ ]  |
| Demonstrates effective oral communication skills | [ ]  | [ ]  | [ ]  |
| Articulates the significance and implications of own work to scientific and lay audiences | [ ]  | [ ]  | [ ]  |
| **Experimental Design, Research and Analytic Skills** |  |  |  |
| Appraises, modifies, and/or creates and implements scientific methods toward addressing problems in biomedical sciences. Biotechnology and Forensic Genetics majors will also demonstrate technical competency in the laboratory | [ ]  | [ ]  | [ ]  |
| Demonstrates mastery of technical and conceptual approaches | [ ]  | [ ]  | [ ]  |
| **Career Development and Collaboration** |  |  |  |
| Engages in independent learning and networking | [ ]  | [ ]  | [ ]  |
| Critically examines and synthesizes ideas, methods, and practices of others | [ ]  | [ ]  | [ ]  |

**Overall Evaluation**

[ ]  Exceeds Expectations [ ]  Meets Expectations
[ ]  Does Not Meet Expectations

[ ] Must repeat the Research Proposal Defense by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (insert deadline date, which can be no later than the end of the following semester).

 [ ] Failed Second Attempt. As this is the second attempt to successfully defend the research proposal, the student will be dismissed from the Graduate School of Biomedical Sciences.

***Signatures:***

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|  |  |  |
| *, Major Professor* |  | *, Program Director* |
|  |  |  |
| *, Committee Member* |  | *, Department Chair (of Student’s Major Professor)* |
|  |  |  |
| *, Committee Member* |  | *Lisa Hodge, PhD, Assistant Dean for Specialized MS Programs* |
|  |  |  |
| *, Committee Member* |  |  |
|  |  |  |
| *, Committee Member (if applicable)* |  | *J. Michael Mathis, Ph.D., Ed.D., Dean* |

**Master of Science**

**Research Proposal Scoring Rubric**

**General Guidelines for Completing the Evaluation**

**Does Not Meet Expectations**: Unable to perform the indicated task at the degree- and stage-specific level of graduate training even with prompting and guidance

**Meets Expectations**: Able to perform the indicated task at the degree- and stage-specific level of graduate training with minimal prompting or guidance

**Exceeds Expectations**: Able to perform the indicated task at or above the degree- and stage-specific level of graduate training without prompting or guidance

1. **Critically analyzes and evaluates literature in the biomedical sciences to discover and implement new knowledge and skills**

**Does Not Meet Expectations -** Student demonstrates a limited understanding of the literature related to their work and is unable to compare and contrast the existing information with their work

**Meets Expectations –** Student demonstrates an understanding of literature related to their work and is able to compare and contrast the existing information with their work, with minimal prompting and guidance

 **Exceeds Expectations -** Student demonstrates a comprehensive understanding of the literature related to their work and is able to compare and contrast the existing information with their work, without prompting or guidance

1. **Demonstrates advanced understanding of a range of technical and conceptual approaches used in biomedical sciences research**

**Does Not Meet Expectations –** Student inadequately describes appropriate technical and conceptual approaches to address biomedical sciences research questions

**Meets Expectations** – Student describes appropriate technical and conceptual approaches to address biomedical sciences research questions, with minimal prompting and guidance

**Exceeds Expectations** – Student describes and applies multiple technical and conceptual approaches to address biomedical sciences research questions, without prompting or guidance

1. **Demonstrates effective written communication skills**

**Does Not Meet Expectations –** Student’s writing does not follow a logical sequence and/or rarely uses appropriate scientific language. The writing contains numerous grammatical and/or spelling errors, thus ineffectively communicating ideas.

 **Meets Expectations –** Student’s writing generally follows a logical sequence and uses appropriate scientific language. The writing may contain some grammatical and/or spelling errors, but effectively communicates ideas.

**Exceeds Expectations –** Student’s writing follows a very logical sequence and uses appropriate scientific language. The writing contains minimal grammatical and spelling errors, thus effectively communicating ideas.

1. **Demonstrates effective oral communication skills**

**Does Not Meet Expectations -** Student does not follow a logical sequence. Student mispronounces terms, does not use appropriate scientific language, makes persistent grammatical errors, and does not speak clearly.

**Meets Expectations –** Student follows a logical sequence but provides minimal elaboration. Student generally pronounces terms correctly, uses appropriate scientific language, makes limited grammatical errors, and speaks clearly most of the time.

**Exceeds Expectations -** Student follows a logical sequence, elaborates well, and provides clear explanations. Student pronounces all terms correctly, uses appropriate scientific language, makes no grammatical errors, and consistently speaks clearly.

1. **Articulates the significance and implications of own work to scientific and lay audiences**

**Does Not Meet Expectations –** Student inadequately discusses the significance or implications of their work

**Meets Expectations –** Student discusses the significance and implications of their work at the graduate level, with minimal prompting and guidance

**Exceeds Expectations -** Student discusses the significance and implications of their work at or above the graduate level, without prompting and guidance

1. **Demonstrates the ability to develop and clearly state hypotheses and design aims and experimental approaches to test proposed hypotheses**

**Does Not Meet Expectations –** Student does not develop or present hypotheses, aims, and experimental approaches to test the proposed hypotheses, even when prompted or guided

**Meets Expectations –** Student develops and presents hypotheses, aims, and experimental approaches to test the proposed hypotheses, with minimal prompting and guidance

**Exceeds Expectations -** Student independently develops and presents hypotheses, aims, and experimental approaches to test the proposed hypotheses, without prompting or guidance

1. **Demonstrates mastery of technical and conceptual approaches**

**Does Not Meet Expectations -** Student does not consistently perform routine techniques and experiments, even with assistance

**Meets Expectations -** Student performs most routine techniques, advanced techniques, and experiments, with minimal assistance

**Exceeds Expectations -** Student consistently performs all routine techniques, advanced techniques, and experiments, without assistance

1. **Demonstrates scientific rigor and reproducibility through accurate data analysis leading to sound scientific conclusions**

**Does Not Meet Expectations -** Student does not consistently explain the rationale/background for the proposed experiments, an/or use the scientific method, and/ or utilize appropriate statistical analyses

**Meets Expectations –** Student explains the rationale/background for the proposed experiments, uses the scientific method, and utilizes appropriate statistical analyses leading to appropriate conclusions, with minimal prompting and guidance

**Exceeds Expectations -** Student clearly explains the rationale/background for the proposed experiments, uses the scientific method, and utilizes appropriate statistical analyses with high rigor leading to appropriate conclusions, without prompting and guidance

1. **Engages in independent learning and networking**

**Does Not Meet Expectations -** Student does not actively and independently review literature, seek out new learning opportunities, and/or discuss research ideas and data, even with prompting and guidance

**Meets Expectations –** Student actively and independently reviews literature, seeks out new learning opportunities, and discusses research ideas and data with others, with minimal prompting and guidance

**Exceeds Expectations -** Student actively and independently reviews literature, seeks out new learning opportunities, and discusses research ideas and data with others, without prompting and guidance

1. **Critically examines and synthesizes ideas, methods, and practices of others**

**Does Not Meet Expectations –** Student does not consistently critically examine and synthesize ideas, methods, and practices of others, or creatively apply them to a biomedical science question, even with prompting and guidance

**Meets Expectations –** Student critically examines and synthesizes ideas, methods, and practices of others, and creatively applies them to a biomedical science question, with minimal prompting and guidance

**Exceeds Expectations -** Student critically examines and synthesizes ideas, methods, and practices of others, and creatively applies them to a biomedical science question, without prompting or guidance