

Oral Prelim Rubric

On a Pass/Fail scale, rate the student's performance in the oral prelim:

1. Research readiness: The student...

- a. ...has **engaged meaningfully in a substantive research** project at UW-Madison..... []
- b. ...has internalized and applies **scientific ethics**..... []
- c. ...clearly understands **scientific methodology** and applies it to their research..... []

On a scale of 1 (poor) to 5 (excellent), where 3 denotes the pass-fail demarcation, rate the student's performance in the oral prelim:

2. Research presentation: The student...

- a. ... explained the **scientific background** of their research clearly..... []
- b. ...presented the research at a **level** appropriate for a set of peers from a related discipline at a scientific conference []
- c. ...showed clear understanding of the literature **cited** in their presentation..... []

3. Questioning on research presentation: The student...

- a. ...was able to **answer** questions about their **research** correctly..... []
- b. ...displayed clear grasp of the **scientific** aspects of the research presented..... []
- c. ...displayed clear grasp of the **technical** aspects of the research presented..... []
- d. ...displayed clear grasp of the sources and implications of **uncertainty and error** in their research..... []

4. Questioning on topics broadly relating to student's research: The student displayed solid understanding of science areas associated with their research by...

- a. ...answering **questions** about material in areas of astronomy relevant to their research correctly..... []
- b. ...displaying the ability to **reason** through questions (physical reasoning)..... []
- c. ...displaying a clear awareness and grasp of the **astronomical literature relevant** to their research..... []