LEARNING OUTCOMES

1. Demonstrate a broad understanding of core astrophysical topics including gravitational dynamics; radiative processes; the interstellar medium; the formation, structure, and evolution of stars and galaxies; cosmology; and observational and numerical techniques.

2. Identify sources and assemble evidence pertaining to questions or challenges in their area of concentration.

3. Synthesize knowledge from disparate sources and evaluate evidence for and against hypotheses.

4. Demonstrate academic mastery in their area of concentration, including an understanding of appropriate research methodologies, current theories, recent findings, and their broader implications.

5. Recognize and apply principles of ethical and professional conduct.