

Research Expectations

06/19/2014

Indicator	Meeting expectations	Approaching Expectations	Below Expectations
Basic Concepts	Fully grasps basic concepts underlying research project.	Can understand concepts involved in research project with some assistance.	Has little grasp of basic concepts underlying research.
Technical Skills	Is capable of quickly adopting technical skills necessary to complete project.	Masters techniques with supervision and assistance.	Needs continual supervision to perform lab work or use tools required in research.
Independent Thinking	Independently analyzes data, generates conclusions and hypotheses.	Contributes to project planning and analysis with moderate guidance.	Little contribution to project design or direction, data interpretation or troubleshooting.
Professional Conduct	Consistently behaves in a professional manner.	Usually behaves in a professional manner. Does not repeat errors.	Frequently fails to behave in a professional manner (shows up for meetings prepared and on time, treats others with courtesy and respect in person and in communications).
Meets Deadlines	Consistently meets deadlines.	Misses some deadlines despite reasonable effort.	Routinely misses deadlines or asks for extensions.
Defines Objectives	Is actively involved in defining achievable objectives that thoroughly addresses fundamental project needs.	Aids in defining objectives. Some may be too simplistic or unrealistic.	Takes little initiative in defining the project.
Communication skills	Written and oral communication is of high quality; student clearly expresses the questions and findings in his/her research.	Written work is clear and adequately presented, but may lack precision and/or concision.	Has difficulty elucidating research questions or adequately presenting data.
Use of Literature	Clearly demonstrates an awareness of the works of others and establishes a context for the project. Shows an understanding of information from multiple literature sources.	Shows limited understanding of the work in the field. Knowledge is primarily from faculty provided materials.	Fails to demonstrate an awareness of the works of others and the significance of their project.
Obtains Appropriate Results	Obtains meaningful results with minimal wasted effort.	Produces some results but not enough. May have difficulty overcoming setbacks.	Generates few meaningful results.
Interprets Data Appropriately	Provides thorough and correct analysis of data.	Provides analysis but partially incorrect or not sufficiently thorough.	Little meaningful analysis of data or blatantly incorrect.
Formulates Supportable Conclusions	Formulates and adequately supports meaningful conclusions.	Needs help in formulating meaningful conclusions or lacks sufficient support for their conclusions.	Conclusions are absent, wrong, trivial, or unsubstantiated.
Organizes Tasks	Effectively organizes project tasks to minimize wasted time and effort.	Identifies relevant tasks but may struggle with setting priorities and planning.	Has difficulty converting broad objectives to specific tasks.

Adapted from Newell et al., 2003

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