

*Ohio State Biochemistry Program*  
**Learning Outcomes**

	<b>Introduce</b>	<b>Reinforce</b>	<b>Professionalize</b>
<b>Demonstrate a broad foundational knowledge of the field of biochemistry</b>	Core curriculum <i>Transcript</i>	Candidacy exam <i>Candidacy rubric</i>	
<b>Demonstrate in-depth knowledge of areas of specialization, including the current status of the field and the gaps in knowledge</b>	Biochemistry electives Attend seminars <i>Transcript</i>	Biochemistry electives Attend seminars and conferences Candidacy exam Public research seminar <i>Transcript</i> <i>Candidacy rubric</i>	Conference presentations Peer-reviewed publications Dissertation Final oral exam <i>Activity report/CV</i>
<b>Critically evaluate scientific work by analyzing, synthesizing and applying prior knowledge</b>	Student seminar <i>Transcript</i>	Student seminar Lab meeting/journal club Candidacy exam Seminars Conferences <i>Transcript</i> <i>Candidacy rubric</i>	Lab group meeting/journal club Dissertation Final oral exam
<b>Conduct meaningful scientific inquiry leading to new knowledge in the field, including devising and testing hypotheses, mastering required methods and techniques, and interpreting research data</b>	Lab rotations <i>Transcript</i> <i>Rotation contracts</i>	Lab research Student advisory committee meetings <i>Post-candidacy progress reports</i>	Lab research Student advisory committee meetings Peer-reviewed publications Dissertation Final oral exam <i>Post-candidacy progress reports</i> <i>Activity report/CV</i>
<b>Articulate effectively (in oral and written form) scientific concepts, methods, results, and conclusions to peers, practitioners, and the public</b>	Student seminar Serve as a TA <i>Transcript</i>	Student seminar Candidacy exam Public research seminar <i>Candidacy rubric</i>	Conference presentations Peer-reviewed publications Dissertation Final oral exam <i>Activity report/CV</i>
<b>Conduct research safely, responsibly and professionally, in accord with the ethical standards and best practices of the profession</b>	First year orientation First year mentoring class EH&S online modules RCR online training <i>Transcript</i> <i>University records</i>	Lab group meeting Lab research EH&S and RCR online refreshers <i>University records</i>	Lab group meeting Lab research Mentoring younger lab members