

## Inquiry Lab Scoring Rubric (Draft Document)

<b>Cookbook lab (0 points)</b>	<b>1 point</b>	<b>2 points</b>	<b>Inquiry lab (3 points)</b>
driven with step-by-step instructions requiring minimum intellectual engagement of the students thereby promoting robotic, rule-conforming behaviors.	mostly driven...	mostly driven...	driven by questions requiring ongoing intellectual engagement using higher-order thinking skills making for independent thought and action.
focuses students' activities on verifying information previously communicated in class thereby moving from abstract toward concrete.	mostly focuses...	mostly focuses...	focuses students' activities on collecting and interpreting data to discover new concepts, principles, or empirical relationships thereby moving from concrete toward abstract.
presumes students will learn the nature of scientific inquiry by "experience" or implicitly; students execute imposed experimental designs that tell students which variables to hold constant, which to vary, which are independent, and which are dependent.	mostly presumes...	mostly requires...	requires students to create their own controlled experimental designs; require students to independently identify, distinguish, and control pertinent independent and dependent variables; promote student understanding of the skills and nature of scientific inquiry.
rarely allows students to confront and deal with error, uncertainty, and misconceptions; do not allow students to experience blind alleys or dead ends.	sometimes allows...	frequently allows...	allows for students to learn from their mistakes and missteps; provide time and opportunity for students to make and recover from mistakes.
employs procedures that are inconsistent with the nature of scientific endeavor; show the work of science to be an unrealistic linear process.	mostly employs...	mostly employs...	employs procedures that are much more consistent with authentic scientific practice; show the work of science to be recursive and self-correcting.