



Tool Kit – Engineering

For lab courses: Provide students with a video of the lab and data collected during the experiment and assign them to develop a laboratory report demonstrating application of theoretical knowledge to the experimental data. See also tool kit for [labs](#).

For project based learning and capstone courses: Use ongoing, formative assessment, including weekly planning, review and critique meetings and written progress reports. Instructors should provide students a regular meeting time every week to go over the design and development issues and provide adequate feedback to lead the students to the product design.

Examinations: Open-ended, open books and notes examinations are recommended. Instructors may email exam questions with a stipulation to return within a designated time frame. (Extended time should be provided to students of varying abilities who request accommodations.) Instructors should communicate their expectations for academic honesty (e.g., no group work, no contract services) and take appropriate steps to support integrity in the testing environment including use of Respondus monitoring. Academic integrity communications and requirements should be applied evenly to all students; it may be a violation of university policy to single students or groups of students out for additional monitoring.

Examinations: If using true / false or multiple-choice questions, develop a deep question bank. Set your Canvas (or Blackboard) exam settings to prevent backtracking and randomize question order. Instructors should communicate their expectations for academic honesty (e.g., no group work, no contract services) and take appropriate steps to support integrity in the testing environment including use of Respondus monitoring. Academic integrity communications and requirements should be applied evenly to all students; it may be a violation of university policy to single students or groups of students out for additional monitoring.

Examinations: if exam answers contain diagrams, equations, graphs, or schematics, instructors may assign students to handwrite the answers on paper and submit as a PDF. Instructors should communicate their expectations for academic honesty (e.g., no group work, no contract services) and take appropriate steps to support integrity in the testing environment including use of Respondus monitoring. Academic integrity communications and requirements should be applied evenly to all students; it may be a violation of university policy to single students or groups of students out for additional monitoring.