Even if one works in a situation where the services of a professional glassblower are routinely available, it is useful to be able to build simple apparatus and perform simple repairs of glassware. Each student will be required to complete, in a satisfactory manner, four simple glassblowing operations: joining of two tubes of like diameter, joining of two tubes of unlike diameter, creation of a test tube bottom, and creation of a T-joint. The four operations can be combined into one grand artistic piece, which should look something like the drawing below.

[Diagram of T-joint and other glassblowing operations]