

You have received a worksheet entitled “First Population Model v2.0.” This is your opportunity to build a real STELLA model with only a little tutorial guidance in carrying out the details of the model building process. Pay attention both to the technical details, like setting scales on graphs, and mathematical/modeling details, like correct units, and the distinction between “required inputs” and “allowable inputs.”

To keep it simple, the first population model has only one stock, “Population,” and two flows, “Births” and “Deaths.” Try to see in the model the principles of System Thinking in action: System as Cause, Operational Thinking, and Closed-Loop Thinking. Which aspects of the model involve each of these ways of thinking? In completing the worksheet, be sure you answer questions like #7 and #12 as requested: sketch your guess at the behavior you expect to observe **before** running the simulation. **No peeking!** You must accept this uncertainty as an opportunity to improve your critical thinking, not persist in the trivial exercise of trying to get the best initial grade on the assignment by pretending you had the “right” sketch from the start. (The chances of your guessing the correct final population are infinitesimal.)

Your assignment is to complete the worksheet, providing answers to all questions, sketches of graphs, and requested printouts of model diagrams, equations, and graphs.

You may (though not required) submit your completed model and worksheet answers electronically. In this case, you will need to email your model to us. Please follow the procedure below:

1. Title your model Pop1\_yourname.stm. For example, Pop1\_Smith.stm.
2. Clearly identify your worksheet answers in an MSWord document, similarly titled. Be sure to include the graph sketches for questions like #7 and #12.
3. Attach your model and worksheet answers to an email with the subject Population Model 1.
4. Send your email with attachments to Martin Kendrick at [mkgrad@uab.edu](mailto:mkgrad@uab.edu)

Check the course website for the due date(s) for this assignment.