James A. Walsh* (jawalsh@oberlin.edu). Conceptual climate models and the undergraduate curriculum.

Were glaciers discharging into the ocean in the tropics at one time? Or was the Earth ever completely ice-covered? Simple energy balance models of planetary climate will be presented, one of which incorporates the movement of glaciers in response to the ice-albedo feedback. Certain aspects of the models are appropriate for the first ordinary differential equations course, while other aspects would fit nicely in a mathematical modeling course having an emphasis on computation. (Received July 18, 2012)