M E 320	Professor John M. Cimbala	Lecture 03
Today, we will:		
Continue our diDo some examp	scussion about fluid properties from Chapter 2 ble problems – viscosity and surface tension	
 Other (miscell a. speed of sou b. vapor press c. viscosity, μ 	laneous) properties and ure, P_v , and kinematic viscosity, v	
b. vapor press c. viscosity, μ	ure, P_{ν} , and kinematic viscosity, ν	



Given: A block of weight W and bottom surface area A slides steadily down an incline at speed V, riding on a thin film of oil of viscosity μ . The oil film thickness is h h ϕ Surface area, A

and the incline angle is ϕ as sketched.

To do: Calculate *V* as a function of the other variables (stay in variable form).

Solution: