

NORTHERN ILLINOIS UNIVERSITY

PHYSICS DEPARTMENT

Physics 210 – Mechanics & Heat

Spring 2022

Lab #5

Lab Writeup Due: In Class Lab Quiz (will be done in class)

Read OpenStax: Chapter 4, Chapter 5.1, Lecture Notes #3 & #4

Free Body Diagrams

for all problems: Use m for mass, W for weight, N for normal force, T for tension, f_k for kinetic friction, f_s for static friction, F for a general force, and θ for an angle. Also use appropriate subscripts for all forces when more than one body is involved in the problem. Do not substitute any algebraic symbols with numbers in your equations—just use only algebraic symbols.