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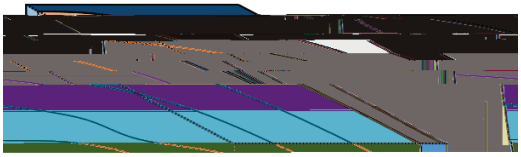
Department of Aerospace Engineering Sciences
UNIVERSITY OF COLORADO BOULDER

Molecular Thermodynamics and Kinetics

New Core Course in *Fluids*

ASEN 5519 – Molecular Thermodynamics and Kinetics – Tu,Th 4:00-5:15 pm, N250

Prof. Timothy K. Minton, tminton@colorado.edu



The objective of this course is to provide an entry point into the microscopic manifestations of chemistry and chemical change for engineering graduate students who have not done previous learning that would prepare them for research or employment in areas where an understanding of molecular-Thiscourse will thus be an introduction to chemical eories of chemical reactions. The focus will be on gas-phase and gas-surface kinetic theory of gases will be covered at a basic level. There will be an quantum mechanics and statistical mechanics, and the course will draw on these criptions of matter to help understand the magnitudes of chemical reaction rates vary with macroscopic ch as temperature, and ic parameters, such as structure, and energy tum states. The course will how elementary reaction roken down into state-to- rates, where potential s control the outcome of ons. By considering these molecular level, students an appreciation for the ween chemical reactions under non-equilibrium vs. ditions.