

Physics 212 spring 2021

[http://ffden-2.phys.uaf.edu/212\\_spring\\_2021.html](http://ffden-2.phys.uaf.edu/212_spring_2021.html)

Today: course info. (syl.), Physics info,  
me, intro to thermodynamics

# Chapter 18 - Intro. to Thermodynamics

read 

## States of matter

3 normal states

Solid

add heat

Liquid

add heat

gas

add heat

(plasma)



ionized gas

gas

⇒ charged electrons are removed.

atoms have "fixed" locations  
atoms can move  
atoms can move  
freely



# State variables

density  $\rho = \frac{M}{V}$

pressure

temperature

volume