

**PHYSICS 230: GENERAL PHYSICS II**  
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**Additional Topics on the Final Exam**

- **Nuclear force, binding energy, and stability**
- **Radioactive decay: mechanisms, rate, and radioactive dating**
- **Nuclear reactions: fission and fusion**
- **The Big Bang: evidence (expansion, microwave background, nucleosynthesis)**

**Additional equations that will be provided on the Final Exam**

$dN/dt = \lambda N$	$N = N_0 e^{-\lambda t}$	$\tau_{1/2} = 0.693/\lambda$
$v_{rec} = Hd$	$H \approx 17 \times 10^{-3} m/s \cdot ly$	$1mole = 6 \times 10^{23} particles$