Monday, December 17/2
Physics 122/121

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1. **Exam Review - Torque**

2. Experiment 7.2 - Range of a Projectile (Lab Manual - Page 45)
   Due - Today

3. Text: Page 536, PP #1-8 (Projectiles Launched Horizontally)

   Text: Page 549, PP #13
   Page 570, Prob. #17, 19, 20 (omit graph)

4. Handout - Projectiles

5. Quiz: Projectiles - Wednesday, Dec. 19/21

6. Unit 3 - Charges, Fields and Circuits

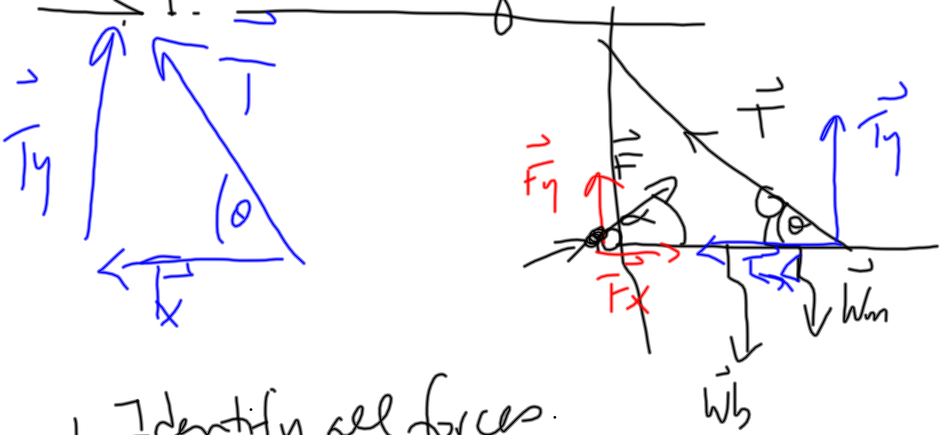
MC/Prob.

Thursd

Review Topics: ~~Torque w Angle~~
Incline Plane
Circular Mot.
2D- Collision
SHM: Mass on Spring
Projectile

Torque with Angle

SOH CAH TOA



1. Identify all forces.
2. Choose a pivot point.

*Place PP at
the location of an unknown force.

3. Determine r values.
4. net torque equation.

$\tau = rF\sin\theta$ → m, N → mN

i.e. $\vec{\tau}_{net} = 0\,Nm$

$+\tau_{F_1} + \tau_{F_2} - \tau_{F_3} = 0$

rotation

5. $\vec{F}_{net\,y} = 0$ or $\vec{F}_{net\,x} = 0$.
6. WS → Check.

$\vec{F}_{hy}$ ⇐ $\vec{F}_h$

Circular Motion

Handout: Problems - Circular Motion

LEVEL 1 -> Packet (Banked and Unbanked Curves, Vertical Circular Motion)

Universal Gravitation

Experiment 8.1 - Kepler's Laws - Page 49

Chapter 12 - Page 580, PP#1-7

Investigation 12-A, Page 581

Handouts (3) - Kepler's Laws, Value of "g", Speed and Period of a Satellite

Simple Harmonic Motion

Text: Page 608, #1-4
Page 623, #23-27, 30 } Mass on Spring

Text: Page 614, #5-8
Page 623, #28, 29 } Pendulum

Answer to #5 is listed as #7's. Scan answers for others.

SHM - Pendulum Lab

Handout: SHM Problems

Projectiles

Text: Page 536, PP #1-8

Text: Page 549, PP #13
Page 570, Prob. #17, 19, 20 (omit graph)