

**FRANKLIN COUNTY BOARD**  
**Campbell Annex Building**  
**Benton, IL 62812**

Date: July 31, 2019

**AGENDA FOR FRANKLIN COUNTY BOARD MEETING**  
**6:00 P.M. TUESDAY, AUGUST 5, 2019**

- I. CALL TO ORDER
- II. ROLL CALL
- III. PLEDGE OF ALLEGIANCE
- IV. PUBLIC COMMENT
- V. APPROVAL OF MINUTES
- VI. COUNTY CLAIMS
- VII. CLOSED SESSION: (1) Personnel ( For the Discussion of the Appointment, Employment, Compensation, Discipline, Performance, or Dismissal), (2) Collective Negotiations ( For the Discussion of Collective Negotiating Matters); (3) Sale, Purchase or Lease ( For the Setting of a Price for Sale, Purchase or Lease of Property), (4) Litigation ( For the Discussion of Pending, Probable or Imminent), and (5) Closed Session Minutes ( For the discussion of Closed Session Minutes).
- VIII. RESUME OPEN MEETING
- IX. NEW BUSINESS
  - 1. Approval of LED Lighting for Franklin County Jail
  - 2. Approval of LED Lighting for Franklin County Justice Center
  - 3. Approval of Floor Grinding Campbell Building Basement
  - 4. Resolution Updating Designated Depositories
  - 5. Ordinance Authorizing Franklin County Debt Certificate Series 2019
  - 6. County Highway Reimbursement - Campbell Building DeHumidifier

**NEXT BOARD MEETING: 6:00**

**p.m. Tuesday, August 20, 2019**

**Committees will meet on Monday, August 19, and Due to Holiday, Tuesday September 2 , 2019**

4:30 pm - Finance

5:00pm - Road and Bridge

5:15pm - Health and Environment

All meetings will be held at the Campbell Building in the County Board room unless otherwise noted. If you have any questions, please contact me at (618) 439 - 3743 or (618) 625 - 3661

Randall Crocker,  
Chair, Franklin County Board

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 311

PROBLEM SET 1

Due date: Wednesday, September 15, 2010

Handwritten notes and calculations follow.

1. A particle of mass m moves in a circular path of radius R. The angular velocity is  $\omega$ . The centripetal force is  $F_c = m\omega^2 R$ . The kinetic energy is  $K = \frac{1}{2} m v^2 = \frac{1}{2} m \omega^2 R^2$ . The potential energy is  $U = -\frac{k}{R}$ . The total energy is  $E = K + U = \frac{1}{2} m \omega^2 R^2 - \frac{k}{R}$ .

2. A particle of mass m moves in a circular path of radius R. The angular velocity is  $\omega$ . The centripetal force is  $F_c = m\omega^2 R$ . The kinetic energy is  $K = \frac{1}{2} m v^2 = \frac{1}{2} m \omega^2 R^2$ . The potential energy is  $U = -\frac{k}{R}$ . The total energy is  $E = K + U = \frac{1}{2} m \omega^2 R^2 - \frac{k}{R}$ .

3. A particle of mass m moves in a circular path of radius R. The angular velocity is  $\omega$ . The centripetal force is  $F_c = m\omega^2 R$ . The kinetic energy is  $K = \frac{1}{2} m v^2 = \frac{1}{2} m \omega^2 R^2$ . The potential energy is  $U = -\frac{k}{R}$ . The total energy is  $E = K + U = \frac{1}{2} m \omega^2 R^2 - \frac{k}{R}$ .

4. A particle of mass m moves in a circular path of radius R. The angular velocity is  $\omega$ . The centripetal force is  $F_c = m\omega^2 R$ . The kinetic energy is  $K = \frac{1}{2} m v^2 = \frac{1}{2} m \omega^2 R^2$ . The potential energy is  $U = -\frac{k}{R}$ . The total energy is  $E = K + U = \frac{1}{2} m \omega^2 R^2 - \frac{k}{R}$ .

5. A particle of mass m moves in a circular path of radius R. The angular velocity is  $\omega$ . The centripetal force is  $F_c = m\omega^2 R$ . The kinetic energy is  $K = \frac{1}{2} m v^2 = \frac{1}{2} m \omega^2 R^2$ . The potential energy is  $U = -\frac{k}{R}$ . The total energy is  $E = K + U = \frac{1}{2} m \omega^2 R^2 - \frac{k}{R}$ .

6. A particle of mass m moves in a circular path of radius R. The angular velocity is  $\omega$ . The centripetal force is  $F_c = m\omega^2 R$ . The kinetic energy is  $K = \frac{1}{2} m v^2 = \frac{1}{2} m \omega^2 R^2$ . The potential energy is  $U = -\frac{k}{R}$ . The total energy is  $E = K + U = \frac{1}{2} m \omega^2 R^2 - \frac{k}{R}$ .