**PHYS 232 Assignment 11 due:10 am Saturday May30, 2020**

1. Show that Equattion 7.9 and example 7.3 give the same answer for *T(E)* in the limit $E\rightarrow U$.

(20%)

1. Show that $Y\_{1}^{-1}(θ, φ)$ in Table 8.3 is normalized.

(30%)

1. Figure 8.3 gives the energy and degeneracy of the first 5 levels for a particle in a cubic box. Find the energy and degeneracy of the next 3 levels (that is the 6th, 7th and 8th).

 (30%)

**+20% for good hand-writing and clear and well-organized solutions.**

**You are expected to work alone. Academic honesty is very important. Cheating will make you lose grades.**