READING ASSIGNMENT

DUE:  Friday, November 3, 11 am
READ: Townsend §9.6, §9.8 and scan already §9.9

Hand your answers back to me either via email (bvolmey@bucknell.edu) or as hardcopy.

1. What is the time independent Schrödinger equation in position-space? (I.e. what is
   the main equation which we will solve for the Hydrogen atom?)

2. How is \( u(r) \) related to \( \psi(r) = \langle r | E, l, m \rangle \) ?

3. What are the possible values of \( l \) and \( m \) (of the orbital angular momentum)?

4. With what of this reading did you have most difficulty and/or what was most inter-
   esting? Any open questions?