**ENGR 2011: Engineering Analysis and Applications**

**Homework No. 14: Inner Products and Norms**

**Goal:** Demonstrate that you understand the basic properties of an inner product and how to prove a functional mapping satisfies the requirements of an inner product.

**Textbook Problems:** 10.1.1, 10.1.4, 10.1.5, 10.2.1, 10.2.2

**Computer Problems:** Use Python as necessary to confirm the above results. For problems involving symbolic solutions, demonstrate the property holds (or doesn’t) using some numerical examples.