

## **Math 4060 (Cherry)**

### **Reading and Individual Study**

Read section 5. We will not cover the entire section, so you do not need to study everything carefully. The key points for us are: Proposition 5.1, Corollary 5.2, the double congruence theorems (*e.g.*, 2ASA), the various centers of triangles (incenter, circumcenter, centroid, orthocenter), the Euler line, cyclic quadrilaterals, and the 9-point circle.

**Written Assignment #15 Due Wednesday, March 1:** Hartshorne exercises 5.3 and 5.6

**Written Assignment #16, Due Friday, March 3:** Hartshorne exercise 5.9. *Hint:* This problem is an “if and only if.” We already did one direction as a previous exercise, so you can just cite the previous exercise (or a Euclid proposition) for one direction. Pay careful attention to the other direction, using Hartshorne’s Proposition 5.8 as a model.