

**SOC 542/CS 548—Fall 2016**  
**Enterprise Software Architecture and Design**  
**Assignment Nine—Event-Driven Architecture—Grading Scheme**

**Entities (10 points)**

- 5 pts: BillingRecord
- 5 pts: Study and DrugTreatmentRecord

**Events (40 points)**

- 15 marks: In ProviderService.java, add code for sending messages in addDrugTreatment, addSurgery and addRadiology operations.
- 10 marks: Create TreatmentListener MDB in ClinicBillingService; subscribes to the "jms/Treatment" topic; create billing record upon receiving "treatment added" messages.
- 10 marks: Create DrugTreatmentListener MBD in ClinicResearchService; subscribes to the "jms/Treatment" topic, filtered for drug treatments; upon receiving "treatment added" messages, create drug record for research purpose.
- 5 marks: DrugTreatmentListener uses annotations to filter for DrugTreatment notifications.

**Testing Videos (50 points)**

- Billing and Research databases before adding treatments
- Add (drug and non-drug) treatments via the REST API (e.g. using curl)
- Treatments added to Billing database; non-drug treatments added to Research database