**CSCI 5333.4 DBMS Mid-Term Examination**

**Grading Notes**

(1) You are encouraged to improve both your modeling skill and general understanding ability.

* Missing classes, e.g.
  + Consignment transaction
  + Item pricing
* Unnecessary classes:
  + Not every noun becomes a class!
  + Output requirements do not always become classes. You just need to make sure that they are supported.
  + E.g.
    - Consignment company: it is a singleton.
    - Goods
    - Tax
    - Pricing history
    - Change Price
    - Display\_Sale
    - Price Tag
    - History
    - Display
* Missing multiplicities, e.g.
  + 1 to 1 between item and pricing.
* Incorrect multiplicities. E.g.
  + 1 to many association between merchandize item and category.
  + Many to many association between Sold Item and Item.
* Missing associations
  + Item sold not associated with item.
  + Staff as an attribute in the class Item instead of using an association between the classes Staff and Item.
  + No association between Item and Category.
  + No association between item and pricing classes.
* Unnecessary associations: e.g.
  + Association between categories to indicate sub-categories.
  + Many to many association between staff and item.
  + Between owner and category.
  + Between staff and category
  + Between owner and staff
* Incorrect associations: e.g.
  + Aggregation between Item and Category (seeing the keyword “belongs to” does not always mean aggregation.)
* Missing attributes: e.g.
  + Address
  + StaffId
  + Pricing information
* Unnecessary attributes: e.g
  + Various Ids from other classes.
  + Model and color in merchandize items.
* Using attributes instead of classes, e.g.:
  + Prices and effectives as attributes in items.
* Incorrect use of generalization, e.g.:
  + Price as a superclass of display price, baseline price and effective date.
  + Staff as a superclass of employee and owner.
* Incorrect UML class notations, e.g.:
  + No separate compartment
  + Mixing relational or ER notations
* Poor naming, e.g.:
  + Unique code
  + Recording
  + Owner ‘views’ Merchandise Item
  + Details (as a class name)
  + O\_Optional\_Email
* Objects modeled as classes. E.g.
  + Category1, Category2, Category3