## Part 2A Revision Summary

- **Overall Changes:** These changes apply to all pages of Part 2A and involved inconsistencies in the naming of attributes and entities across different parts of the project. There were discrepancies between the names of attributes and entities in the EER Diagram and the relational schema. These were subtle differences, but the names did not all match exactly. We went through our entire project making sure that all entity and attribute names matched. We used our Data Dictionary as the master list and made sure all names matched exactly. These changes applied to all pages of our project part 2a, and won't be specifically mentioned on each page below, but were applied to all pages of the project.

- **Page 1:** The changes made to this page involved our ternary relationship that existed between Student, Rented Residence, and Lease. In our original design, we felt the Rented Residence was the link between Student and Lease. Based on Dr. Mendoza's recommendation, and also a review of the project specs, we determined that the ternary relationship should be involved with Room instead of Rented Residence. In the business rules, it says that a student rents a room of either a Student Apartment or Residence Hall. Since Rented Residence is the union between these two entities and a Rented Residence contains a Room, the ternary relationship makes more sense against Room. A student rents a room, not a rented residence that contains a room. With this change, we also changed the primary key of Room to Room Number instead of Place Number. We also moved Place Number to be an attribute of the Rents relationship because the Place Number uniquely identifies the Room being rented in terms of the relationship Rents.

- **Page 2:** The change made on this page was we had an attribute Quarter on the Invoice entity. We are not sure how that got there but it has been removed.

- **Page 6:** The main change here involved the Student relation. We had as a foreign key Staff Number. This foreign key pointed to the Advisor relation. We changed the foreign key name to Advisor Number as that makes more sense. The project specs say that a Student is assigned an Advisor, so changing this to show that makes more sense to someone looking at our relational schema and trying to understand what is going on. Lastly, similar to Page 2 above, we had an extra unneeded attribute in the Invoice relation called Quarter. This attribute has been removed from the revised relational schema.

- **Page 8:** This change was based on the change on Page 6 of removing the Quarter attribute from the Invoice entity. The relational schema image was updated accordingly.

- **Page 10:** The change here was related to the change on Page 1 involving the ternary relationship. With the changes to the ternary relationship, the EER Diagram, relational schema, and explanation was updated to reference changes in the ternary relationship.

- **Page 11:** There were a few changes on this page. First, we changed the foreign key of the Advisor relation to say Advisor Number instead of Staff Number. Even though this foreign key points to the Staff Number primary key in the Staff Member relation, it makes more sense to use the word Advisor Number in this case as it's clearer to someone reading our project. The next change involved a misspelled word "add" in the last sentence. This word should have been "adding". Lastly, we added more to the explanation to explain the different ways of converting the EER Diagram to the relational schema. Since there were four ways, we talked about each of the four options and why we ended up choosing option 8A instead of any of the other options.

- **Page 12:** The main change on this page involved the Relationship Attributes Inspection Report. We had the Staff Member involved in the Inspection report listed as an attribute. Since Inspection Report is part of a relationship between Student Apartment and Staff Member, we don't need to explicitly list the Staff Member's name as it is there because of the relationship already.

- **Page 15-16:** The main change here is explained on Page 1 above. The ternary relationship changed, so the images and explanation about the ternary relationship were changed to match the update to the ternary relationship. Refer to Page 1 above for a detailed explanation of why the change was made to the ternary relationship.