

Some not-uncommon UML mistakes

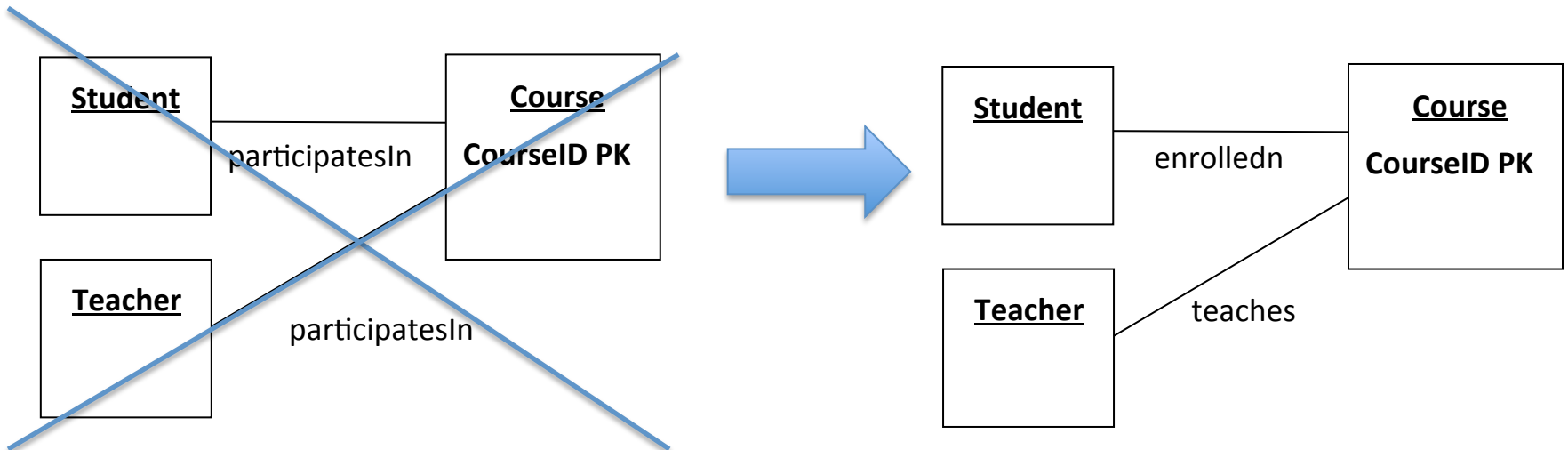
When used to represent a DB, UML diagrams do **NOT** represent control flow (i.e., do **NOT** represent how the data moves through the data base)

So consider this perfectly fine UML snippet

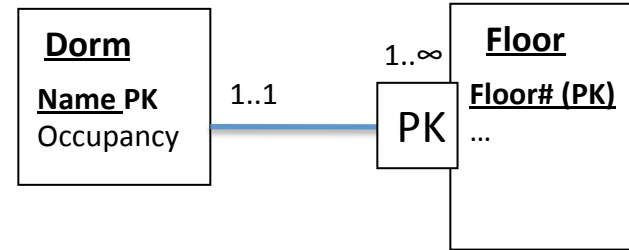
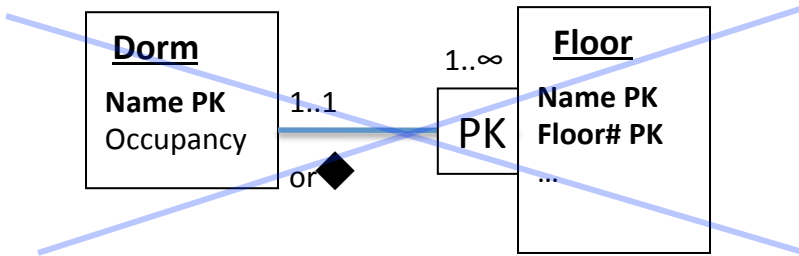


If upon acceptance, a record from “Applicant” were copied (perhaps with revisions) to “Student, we would NOT put an associative link between Applicant and VandyStudent for this reason – not because of CONTROL flow.

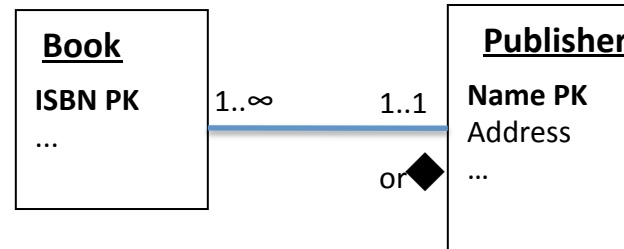
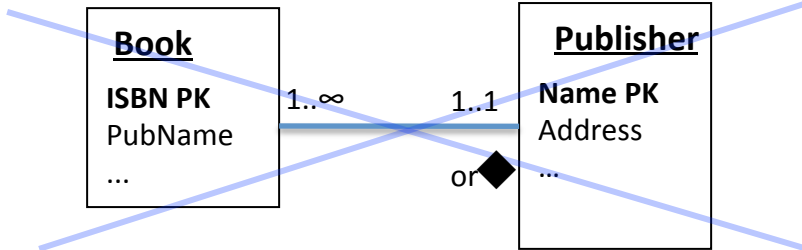
All relationships/associations (and classes) should have unique name



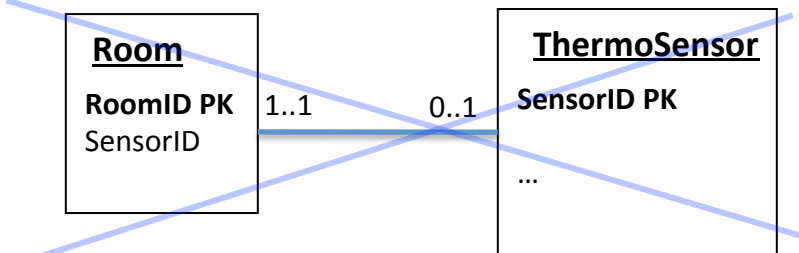
Avoid implicit associations!



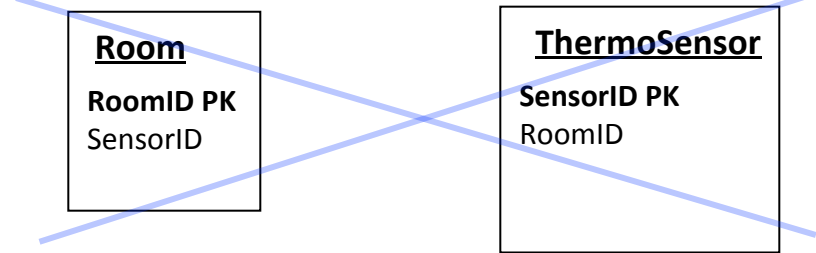
If by "Name" you mean the same thing, in both Floor and Dorm – that is, the name of a Dorm, then that is an implicit association that is redundant (and wrong) in the case above/left



If by "PubName" you mean the same thing as Name in Publisher, then this is an implicit association that is redundant (and wrong) in the case above/left

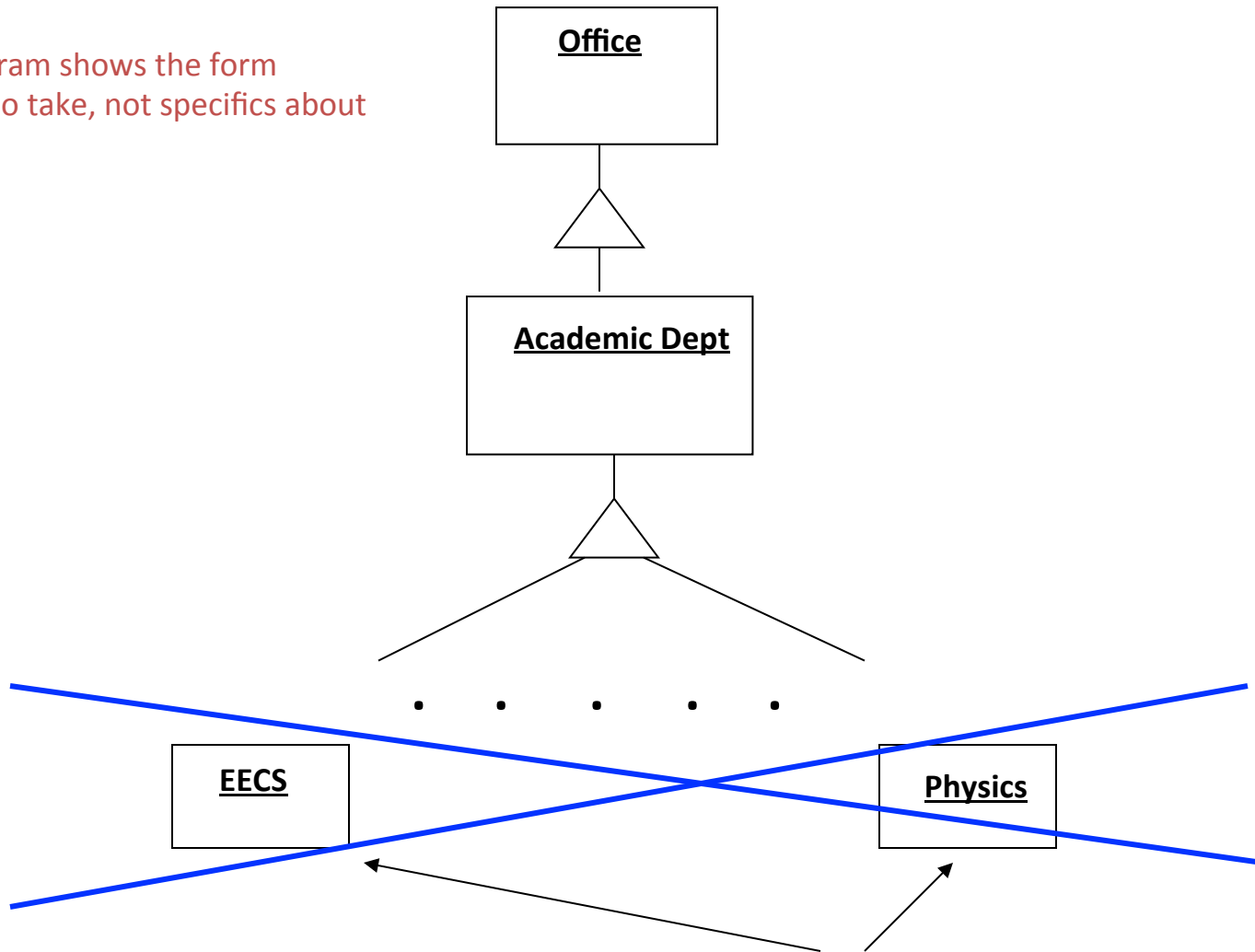


SensorID = SensorID



RoomID = RoomID
SensorID = SensorID

A UML diagram shows the form the data is to take, not specifics about the content

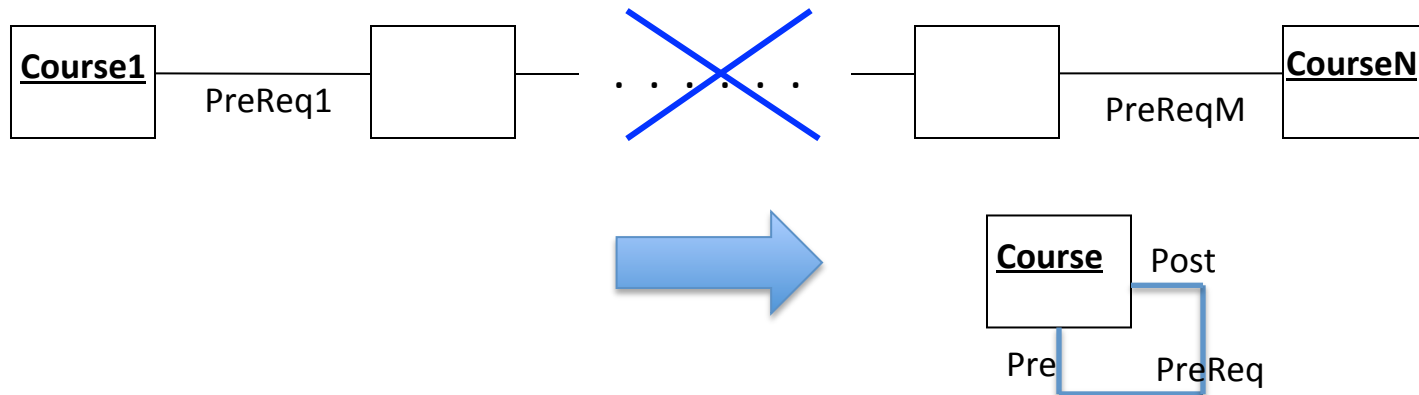


Clue: if you have a class that you intend to have only one entry in it, then that one “entry” is better represented as the value of an attribute (like DepartmentName).

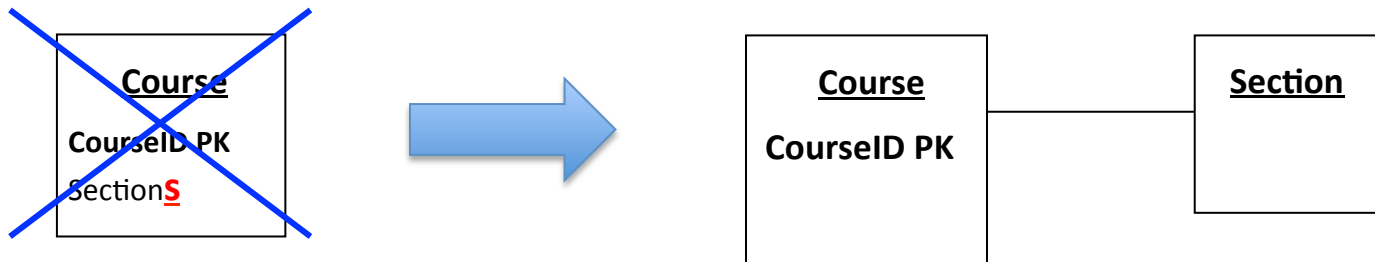
In contrast, if this were a DB across many institutions with many EECS departments, then perhaps the leaves above would be appropriate

Other

A UML diagram has a well defined number of classes and and relationship (should not have anything like:



Attributes should be atomic



Just as singleton classes signal the the probable need for an attribute (values) instead, a composite (plural) attribute signals probable need for a class instead