1.º Mapping: between a class from A and a class from B using **rdfs:subClassOf**

Explanation:

Class student (from A) can be mapped to the class people (from B), through the subclass relationship: **rdfs:subClassOf**. This means that any instance (student) that belongs to class sebas:students is also of type vu:people. In other words, every student is a person.

2.º Mapping: between a class from A and a class from B using owl:equivalentClass

Explanation:

Class course (from A) can be mapped to the course class (from B), through the class equivalence relation: **owl:equivalentClass**. This means that any instance that belongs to one of the classes (from any of the ontologies) can be integrated into the other. This means that, any course can belong to any of the classes.

3.º Mapping: between a property from A and a property from B using rdfs:subPropertyOf

Explanation:

The Object property sebas:belongsTo from A can be mapped to the object property vu:offeredByFaculty from B by using the subproperty relation **rdfs:subPropertyOf**.

This is true because in ontology A the use of belongsTo determines that a Course belongs to a Major and in ontology B the use of offeredByFaculty determines that a Major is offered by a faculty. Therefore, a course is always offered by a faculty, which means that the belongsTo property is a lower specification than the offeredByFaculty property.

4.º Mapping: between a property from A and a property from B using either owl:equivalentProperty, owl:disjointProperty, owl:inverseOf, or owl:propertyChainAxiomExplicação:

Explanation:

I chose owl:inverseOf.

The Object property sebas:teaches from A can be mapped to the object property vu:taughtBy from B by using **owl:inverseOf**.

This is true because in ontology A the object property sebas:teaches is used to determine that a teacher teaches a course. Whereas, in ontology B the vu:taughtBy object property is used to determine that a course is taught by a teacher. This means that, they are inverse properties.

5.º Mapping: between an individual from A and an individual from B using owl:differentFrom

Explanation:

The instance of the class teacher of ontology A sebas:VictorBoer can be mapped using **owl:differentFrom** with the instance of the class person of ontology B vu:prof\_dr\_C\_Fonseca\_Guerra. This means that, despite being both teachers, they are distinct individuals.

6.º Mapping: between an individual from A and an individual from B using owl:sameAs

Explanation:

The instance of the class teacher of ontology A sebas:K.S\_Schlobach can be mapped using owl:sameAs with the instance that is present in the class person of ontology B vu:dr\_KS\_Schlobach. In conclusion, despite belonging to different ontologies these instances point to the same individual.