

### **CPS 510: Assignment 6**

Hunter Shiells - 500946154

Bill Wang - 501012196

Manav Dhora - 500973883

**Located at the top of each table section is a table that includes all of the table attributes.**

**PK - Primary key**

**U - Unique**

**Student Table:**

<b>SIN (U)</b>	<b>Student_number (PK)</b>	<b>U o G</b>	<b>First_ name</b>	<b>Last_ name</b>	<b>Phone_ number</b>	<b>indig</b>	<b>Citizenship</b>	<b>Disability</b>
--------------------	--------------------------------	----------------------	------------------------	-----------------------	--------------------------	--------------	--------------------	-------------------

Includes a primary key of Student\_number and a unique identifier SIN#

**Functional Dependencies of Student Table:**

Student\_number -> SIN, SIN -> Student\_number

Student\_number -> UoG, first name, last name, phone number, indig, citizenship, disability

**Transaction Table:**

<b>Student_number (PK)</b>	<b>TID(U)</b>	<b>TAmount</b>	<b>Tdesc</b>	<b>Tterm</b>	<b>Tdate</b>
--------------------------------	---------------	----------------	--------------	--------------	--------------

Includes a primary key relationship of student number to the Table student, with a unique transaction ID.

**Functional Dependencies of Transaction Table:**

Student\_number -> TID

TID -> TAmount, Tdesc, Tterm, tdate

**Addresses Table:**

<b>Student_number (PK)</b>	<b>Address</b>	<b>City</b>	<b>Prov</b>	<b>Country</b>	<b>Postal</b>
--------------------------------	----------------	-------------	-------------	----------------	---------------

Includes primary key of student number references student table.

**Functional Dependencies of Addresses Table:**

Student\_number -> address, city, prov, country, postal

**Course Table:**

Course_number(PK)	Course_name	Credits
-------------------	-------------	---------

Includes a primary key Course number

**Functional Dependencies of Course Table:**

Course\_number -> Course\_name, Credits

**Section Table:**

Course_number	Instructor	Section_number (PK)	SYear	Sterm
---------------	------------	------------------------	-------	-------

Includes a reference to course number, and also a primary key of section number

**Functional Dependencies of Section Table:**

Course\_number -> Section\_number, Section\_number -> Course\_number

Section\_number -> Instructor, Syear, Sterm

**Department Table:**

Course_number (PK)	Dhead	Dphone	Demail	Dname	Doffice
-----------------------	-------	--------	--------	-------	---------

Includes a primary key reference of course number.

**Functional Dependencies of Department Table:**

Course\_number -> Dname, Dname -> Course\_number

Course\_number -> Dhead, Dphone, Demail, Doffice

**Registered Table:**

Student_number	Course_number	Section_number
----------------	---------------	----------------

Includes a relationship between all of the main keys, section number, course number and student number.

**Functional Dependencies of Registered Table:**

Course\_number -> Student\_number, Student\_number -> Course\_number

Course\_number -> Section\_number, Section\_number -> Course\_number

Section\_number -> Student\_number, Student\_number -> Section\_number

**Undergrad Table:**

Student_number(U)	UoG	Udegree
-------------------	-----	---------

Includes a unique reference to the student number.

**Functional Dependencies of Undergrad Table:**

Student\_number -> UoG, Udegree

**Graduate Table:**

Student_number (U)	UoG	GDegree	Gphone	Goffice
-----------------------	-----	---------	--------	---------

Includes a unique key reference to the student number.

**Functional Dependencies of Graduate Table:**

Student\_number -> UoG, GDegree, GPhone, GOffice

**SDegree Table:**

Student_number(PK)	UDegree	School
--------------------	---------	--------

Includes a primary key reference to student number

**Functional Dependencies of SDegree Table:**

Student\_number -> UDegree, School

**Documents Table:**

<b>Student_number(U)</b>	<b>Enrollment</b>	<b>Transcript</b>	<b>TransferCredits</b>
--------------------------	-------------------	-------------------	------------------------

Includes a unique reference to the student number.

**Functional Dependencies of Documents Table:**

Student\_number -> Enrollment, Transcript, TransferCredits