

NCP Assignment

XML Schema

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[CB.EN.U4CSE18258]

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<?xml version = "1.0" encoding = "UTF-8"?>
<xs:schema xmlns:xs = "http://www.w3.org/2001/XMLSchema">
  <xs:simpleType name="LimitedString">
    <xs:restriction base="xs:string">
      <xs:maxLength value="40" />
    </xs:restriction>
  </xs:simpleType>
  <xs:element name = "course">
    <xs:complexType>
      <xs:sequence>
        <xs:element name = "department_prefix" type = "xs:string" />
        <xs:element name = "course_no" type = "xs:int" />
        <xs:element name = "credits" type = "xs:int" default="4" />
        <xs:attribute type="LimitedString" name="title" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name = "Instructor">
    <xs:complexType>
      <xs:sequence>
        <xs:element name = "course offering" type = "xs:string" />
        <xs:element name = "section_number" type = "xs:int" />
        <xs:element name = "consent" type = "xs:boolean" default="no" />
        <xs:attribute type="LimitedString" name="title" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name = "Student">
    <xs:complexType>
      <xs:sequence>
        <xs:element name = "name" type = "xs:string" />
        <xs:element name = "IDREF" type = "xs:string" />
        <xs:element name = "student_ID" type = "xs:int" />
        <xs:element name = "consent" type = "xs:boolean" default="no" />
        <xs:attribute type="LimitedString" name="title" />
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
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</xs:complexType>
<xs:key name="IDREF" >
  <xs:selector xpath="//Transcript" />
  <xs:field xpath="IDREF" />
</xs:key>

<xs:keyref name="IDRef" refer="IDREF">
  <xs:selector xpath="//Student" />
  <xs:field xpath="IDREF" />
</xs:keyref>
</xs:element>

<xs:element name = "Transcript">
  <xs:complexType>
    <xs:sequence>
      <xs:element name = "IDREF" type = "xs:string" />
      <xs:element name = "CGCP" type = "xs:decimal" />
    </xs:sequence>
  </xs:complexType>
</xs:element>

<xs:element name="majors">
  <xs:simpleType>
    <xs:restriction>
      <xs:simpleType>
        <xs:list />
      </xs:simpleType>
      <xs:length value="3"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>

<xs:element name="semester records">
  <xs:simpleType>
    <xs:restriction>
      <xs:simpleType>
        <xs:list />
      </xs:simpleType>
      <xs:length value="4"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>

  <xs:element name = "consent" type = "xs:boolean" default="no" />
  <xs:attribute type="LimitedString" name="title" />
</xs:sequence>

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        </xs:complexType>
    </xs:element>

    <xs:element name = "Transcript">
        <xs:complexType>
            <xs:sequence>
                <xs:element name="enrollment records">
                    <xs:simpleType>
                        <xs:restriction>
                            <xs:simpleType>
                                <xs:list>
                                </xs:list>
                            </xs:simpleType>
                            <xs:length value="4"/>
                        </xs:restriction>
                    </xs:simpleType>
                </xs:element>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element>
        <xs:simpleType>
            <xs:list itemType="xs:string" />
        </xs:simpleType>
    </xs:element>
</xs:schema>

```