Due: Tue. Nov. 20, 2012.

Question 1 Show the tree representation of the XML document shown on next page.

Question 2 Write a DTD for the XML document shown on next page.

Question 3 Write an XPath query for each of the following:
Q1. List last names of students (including lname tags).
Q2. List last names of students (only the text).
Q3. List id of MAT students.
Q4. List id of students in 529.
Q5. List id of students taking more than one course.
Q6. List id of students whose majors are not listed.
<?xml version="1.0"?>
<univ1>
  <student>
    <id>100</id>
    <fname>Ab</fname>
    <lname>Al</lname>
    <major>CSC</major>
    <classes>
      <course>
        <cno>529</cno>
        <title>AI</title>
        <creditHours>3</creditHours>
      </course>
    </classes>
  </student>
  <student>
    <id>200</id>
    <fname>Jo</fname>
    <lname>Br</lname>
    <major>MAT</major>
    <classes>
    </classes>
  </student>
  <student>
    <id>400</id>
    <classes>
      <course>
        <cno>698</cno>
        <title>Proj</title>
        <creditHours>3</creditHours>
      </course>
    </classes>
  </student>
  <student>
    <id>500</id>
    <classes>
      <course>
        <cno>698</cno>
        <title>Proj</title>
        <creditHours>3</creditHours>
      </course>
      <course>
        <cno>529</cno>
        <title>AI</title>
        <creditHours>3</creditHours>
      </course>
    </classes>
  </student>
</univ1>