# Assignment 4 -MongoDB  Labs 9 and 10 -8 marks – deadline April 4th 2018

For this assignment, you will create the University database that is like Assignment 2.

**Students**

StudentNo : number

StudentFirstName: string

StudentLastName: string

Degree: string

Faculty: string

GPA: number

Enrolled: array => object { CourseNo : string, ProfFirstName: string, ProfLastName: string, Term : string }

**Professors**

ProfFirstName: string

ProfLastName: string

ProfPhone: string

Faculty: string

CanTeach: array => object { CourseNo: string, Term: string, Preference: string }

Teaches: array => object { CourseNo: string, Term: string }

**Courses**

CourseNo: number

CourseName: string

CourseDescription: string

Faculty: string


You will create 3 collections in your database and insert them with several documents that will be able to answer the following questions:

1. Create 3 collections named Students, Professors, and Courses.
2. Insert about 10 Students to the Students collection. Each document will have the following fields: StudentNo, StudentFirstName, StudentLastName, Degree, Faculty, GPA, Enrolled
3. Insert about 5 Professors to the Professors collection. Each document will have the following fields: ProfFirstName, ProfLastName, ProfPhone, Faculty, CanTeach, Teaches

4. Insert about 5 courses to the Courses collection. For the course description, you may copy from the Ryerson course calendar. Each document will have the following fields: CourseNo, CourseName, CourseDescription, Faculty
5. List all the documents for the collections Students, Professors, and Courses.
6. Write a query to find one of your records by name without using limit(). You can use the findOne() function and pay attention to the format from the output.
7. Write a query that retrieves the top 5 newest student.
8. Update your records ( Name or StudentNo or Faculty ).
9. Write a query to change all the students from the Engineering faculty to Arts faculty.
10. Write a query to find in the course description that contains the word "advanced"

You will need to submit screenshots of your collections, the queries used to answer the questions, and the output of the queries.