**Ministry Of Higher Education and Scientific Research**





**AL-Mustansiriya University/College of Science/Department of Computer Science**

**(الخطة الدراسية للمساق )**

***Course Plan***

|  |  |
| --- | --- |
| **Course No.:** | **Course Name: : Information Retrieval** |
| **Academic Year:   2021-2022** | **Time Division: 4 hours** |
|  |  |

**Course Description**

* Information Retrieval the tracing and recovery of specific information {document, images, text also video } of unstructured nature, in this course we focus on the " text " that satisfies an information need from within large collection that is usually stored on computer.

|  |
| --- |
| .  **Course Intended Outcomes:**  At the end of the course , student are expected to learn how the computer deal with big data and retrieved the required information by using many Algorithm, to help them select the interested information. |
|  |

# Course Outline:

|  |  |  |
| --- | --- | --- |
| **Week** | **Description depends on the Timing table(Theoretical and piratical )** | |
| **1** | **Boolean Retrieval** | **VB.Net Graphical User Interface** |
| **2** | **The term vocabulary and posting list** | **VB.NET String** |
| **3** | **Index Compression** | **VB.NET Program Flow Control Tutorials** |
| **4** | **Spelling correction** | **VB.NET Files** |
| **5** | **Text classification** | **LZW Algorithm with examples** |
| **6** | **Support vector machines** | **Linear Least Square Error** **Algorithm** |
| **7** | **Support vector machines** | **Support Vector Machine algorithm** |
| **8** | **Exam 1** | **Support Vector Machine algorithm** |
| **9** | **Flat Clustering** | **Exam 1** |
| **10** | **Flat Clustering** | **K-Means Algorithm** |
| **11** | **Hierarchical Clustering** | **K-Means Algorithm** |
| **12** | **Web search basics** | **KNN Algorithm** |
| **13** | **Web crawling and indexes** | **KNN Algorithm** |
| **14** | **Link analysis** | **Internet Application** |
| 15 | **Exam2** | **Exam 2** |

**Textbooks and Suggested references:**

|  |
| --- |
|  |
| * Introduction to information retrieval 2009 * Guide to information retrieval : information retrieval process 2017 |
|  |

**Marking:**

|  |  |
| --- | --- |
| **First Semester** | **Final Exam** |
| |  |  |  |  | | --- | --- | --- | --- | | **1st exam** | **2nd exam** | **Practical** | **Activity** | | **13** | **13** | **14** |  | | |  | | --- | |  |   60 |

**Assignments and/or Projects:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Assignment/Project** | **Description** | **Due Date** | **Marking** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Instructor information:**

|  |  |  |
| --- | --- | --- |
| Lecture Room: [ ] | Time: | |
| Instructor's Name :Dr. Huda Abdulaali | | Office No.: | | |
| E-Mail:hudaabdulaali2015@gmail.com  Lecturer: khlood ibraheem  E-Mail:Khlood.cs@gmail.com  ***NOTES:***   * ***Office Hours: Other office hours are available by appointment.*** * ***The content of this syllabus not be changed during the current semester.*** | | | |  |

**Lecturer Signature Chairman Signature**