



Information Systems Department

Course Syllabus

IS771- Business Intelligence

Catalog Description: Business intelligence is an umbrella term that combines architectures, tools, databases, analytical tools, applications and methodologies. The major objectives of business intelligence is to enable interactive access to data and to give business managers the ability to conduct analysis and make better decisions. Decision support systems are computer-based information systems that combine models/methods and data in an attempt to solve semi/non-structured decision problems with extensive user involvement through a friendly user interface. Business high-level decisions are often semi/non-structured and require an increased level of intelligent and technical support, in particular, when they become rich in data. Decision support systems can be integrated with variable business intelligence techniques to support related decision problem solving. The subject covers how to design, implement and integrate business intelligence techniques with methods to support business decision-making. The students will be made familiar with Data warehouse, OLAP, Data and Text Mining and data visualization in order to understand different component of Business Intelligence systems. In the end, students will present their own BI project thus enhancing their practical skill..

Credit Hours: **3 Credit hours:** 3 Lectures per week 0 Labs. per week 0 Recitation per week

Prerequisites: None

- Course Learning Outcomes:**
1. Apply the concepts of decision making and modelling as a problem solving approach
 2. Describe components of Business intelligent systems
 3. Acquire the necessary skills to model the analytical requirements of business for OLAP purpose.
 4. Learn the data and text mining techniques to discover information from business data
 5. Apply intelligent systems and methodologies to decision making
 6. Design and develop Business Intelligent systems for specific applications.



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Major Topics:

- Basics about Decision Making.
- Operations Research and Decision Making.
- The essentials of Business Intelligence (BI)
- Introduction and history of Business Intelligence
- Components of Business Intelligence
- Data warehouse.
- Modelling Data warehouse.
- OLAP operations.
- ROLAP and OLAP
- Data Mining
- Text Mining
- Data Visualization
- Final Project Demo

Text Books:

Decision Support & Business Intelligence Systems; Turban, et al. 9th edition, ISBN: 978-0136107293.

J. Han and M. Kamber, Data Mining: Concepts and Techniques, 3rd ed. Morgan Kaufman, 2012, ISBN: 978-0123814791



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Grading:

- ⦿ The grading scale for this course is:

95 - 100	A+	Passing
90 - 94	A	Passing
85 - 89	B+	Passing
80 - 84	B	Passing
75 - 79	C+	Passing
70 - 74	C	Passing
0 - 69	F	Failing

- ⦿ Final grades will be determined based on the following components:

- . 60% Semester Work
- . 40% Final Exam

- ⦿ Students may not do any additional work for extra credit nor resubmit any graded activity to raise a final grade.

- ⦿ Late submissions will not be accepted for any graded activity for any reason.

- ⦿ Students have one week to request the re-grading of any semester work.

Students should attend 80% of the overall course hours taught in the semester as per the University regulations.

Attendance Policy:

If a student fails to achieve this portion, he/she shall not be allowed to appear in the final exam and shall be awarded “DN” grade and repeat the course.

The instructor will use several manual and automated means to detect cheating and/or plagiarism in any work submitted by students for this course.

Cheating and Plagiarism Policy:

When a student is suspected of cheating or plagiarism, the instructor raises the issue to the disciplinary committee.



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Communications: Registered students will be given access to a section of the Learning Management System (LMS) for this course. LMS will be used as the primary mechanism to disseminate course information, including announcements, lecture slides, assignments, and grades.

Communication with the instructor on issues relating to the individual student should be conducted using CIS email, via telephone, or in person.