The Hashemite University

الجامعـــــة الهاشميـــــة

Deanship of Academic Development and International Outreach

عمادة التطوير الأكاديمي والتواصل الدولي

Syllabus*: Business Data Analytics (2010041250)

Second Semester 2021- /2022-

COURSE INFORMATION	
Course Name: Business Data Analytics **Semester:** Second **Department:** Department of Information Technology **Faculty:** Prince Al-Hussein bin Abdullah II Faculty for Information Technology	**Course Code: 2010041250** **Section:** 1 **Core Curriculum**:
Day(s) and Time(s): Sunday: 9:00-10:00 Tuesday: 9:00-10:00 Thursday: 9:00-10:00 **Classroom:** HR 203	**Credit Hours:** 3 **Prerequisites**: 110108103

COURSE DESCRIPTION

This course introduces the fundamental concepts and practice of descriptive, predictive, and prescriptive analytics to identify and analyze business data. The course also covers part of Python libraries of data science to make sense of the collected data on the business websites and pages on social networks such as Facebook and/or Twitter, sentiment analysis, and customer opinion on products trends through text analysis techniques.

DELIVERY METHODS

The course will be delivered through a combination of active learning strategies. These will include:

- PowerPoint lectures and active classroom based discussion
- Collaborative learning through small groups acting in an interdisciplinary context.
- Relevant films and documentaries.
- Working on tools through small groups.

FACULTY INFORMATION

Name	**Hind Bani Milhem**
Academic Title:	**Assistant Professor**
Office Location:	**IT 321**
Telephone Number:	
Email Address:	**Hinda_is@hu.edu.jo**
Office Hours:	Sunday 11.00-12.00 Tuesday 11.00-12.00 Thursday 11.00-12.00 *Please send an e-mail (hinda_is @hu.edu.jo) to meet at any other time.*

REFERENCES AND LEARNING RESOURCES

Required Textbook:

Business Analytics by James R. Evans, 2nd edition; Publisher: Pearson; ISBN-13: 9780321997821.

Suggested Additional Resources:

- Data Analysis and Visualization Using Python, Dr. Ossama Embarak, ISBN-13 (electronic): 978-1-4842-4109-7, Copy right 2018.
- Essentials of Business Analytics (1st ED.); by Camm/Cochran/Fry/Ohlmann/Anderson/Sweeney/Williams; ISBN: 978-1-285-18727-3.

STUDENT LEARNING OUTCOMES MATRIX*

Core Curriculum Learning Outcomes	Program Learning Outcomes	Course Objectives	Course Student Learning Outcomes	Assessment Method
CC-LO-3 Preparing the competitiveness of graduates at a level capable of supplying the Jordanian and international market with qualified scientific competencies.	PLO-1: Demonstrate proficiency in different data analytics algorithms and techniques.	Understand the fundamental concepts and practice of descriptive, predictive, and prescriptive analytics to identify and analyse business data.	Present the process of business data analytics which consists of the descriptive, predictive, and prescriptive analytics and follow it to solve any business problem.	• Mid Exam • Project
		Explain the process flow of solving problem in business analytics.	Present several examples of solving business problems following the flow of the business data analytics process to make decisions.	• Mid Exam • Project
		Demonstrate the important tools of business analytics.	Present several business data analytics tools for solving business problems, describe each of them, and be able to choose the right tool.	• Mid Exam • Project
		Be able to apply the (Python libraries-Jupyter) of data science to collect and analyse data on the business websites and pages on social networks	Apply Python Jupyter notebook to collect and analyse data on the business websites and social networks and use Twitter as an example.	• Mid Exam • Project
		Discuss customer opinion on products trends through sentiment analysis and text analysis techniques.	Define both of the text and sentiment analysis and present several examples on the customer opinion on products trends such as Facebook or Twitter.	• Mid Exam • Project
		Prepare coherent and structured technical report in a group and deliver oral presentation	Give a business problem and be able to solve it and make decision following the business data analytics process and by applying Python Jupyter as a tool. Then deliver both a technical report and oral presentation on that.	• Mid Exam • Project

ACADEMIC SUPPORT

It is The Hashemite University policy to provide educational opportunities that ensure fair, appropriate and reasonable accommodation to students who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities are encouraged to contact their Instructor to ensure that their individual needs are met. The University through its Special Need section will exert all efforts to accommodate for individual's needs.

Special Needs Section:
Tel:
Location:
Email:

COURSE REGULATIONS

Participation

Class participation and attendance are important elements of every student's learning experience at The Hashemite University, and the student is expected to attend all classes. A student should not miss more than 15% of the classes during a semester. *Those exceeding this limit of 15% will receive a failing grade regardless of their performance*. It is a student's responsibility to monitor the frequency of their own absences. **Attendance record begins on the first day of class irrespective of the period allotted to drop/add and late registration. It is a student's responsibility to sign-in; failure to do so will result in a non-attendance being recorded.**

In exceptional cases, the student, with the instructor's prior permission, could be exempted from attending a class provided that the number of such occasions does not exceed the limit allowed by the University. The instructor will determine the acceptability of an absence for being absent. A student who misses more than 25% of classes and has a valid excuse for being absent will be allowed to withdraw from the course.

Plagiarism

Plagiarism is considered a serious academic offence and can result in your work losing marks or being failed. HU expects its students to adopt and abide by the highest standards of conduct in their interaction with their professors, peers, and the wider University community. As such, a student is expected not to engage in behaviours that compromise his/her own integrity as well as that of the Hashemite University.

Plagiarism includes the following examples and it applies to all student assignments or submitted work:

- **Use of the work, ideas, images or words of someone else without his/her permission or reference to them.**
- **Use of someone else's wording, name, phrase, sentence, paragraph or essay without using quotation marks.**

- **Misrepresentation of the sources that were used.**

The instructor has the right to fail the coursework or deduct marks where plagiarism is detected

Late or Missed Assignments

In all cases of assessment, students who fails to attend an exam, class project or deliver a presentation on the scheduled date without prior permission, and/or are unable to provide a medical note, will automatically receive a fail grade for this part of the assessment.

- Submitting a term paper on time is a key part of the assessment process. Students who fail to submit their work by the deadline specified will automatically receive a 10% penalty. Assignments handed in more than 24 hours late will receive a further 10% penalty. Each subsequent 24 hours will result in a further 10% penalty.
- In cases where a student misses an assessment on account of a medical reason or with prior permission; in line with University regulations an incomplete grade for the specific assessment will be awarded and an alternative assessment or extension can be arranged.

Student Complaints Policy

Students at The Hashemite University have the right to pursue complaints related to faculty, staff, and other students. The nature of the complaints may be either academic or non-academic. For more information about the policy and processes related to this policy, you may refer to the students' handbook.

COURSE ASSESSMENT

Course Calendar and Assessment

Students will be graded through the following means of assessment and their final grade will be calculated from the forms of assessment as listed below with their grade weighting taken into account. The criteria for grading are listed at the end of the syllabus

Assessment	Grade Weighting	Deadline Assessment
Mid Exam	40%	To be announced
Project	20%	To be announced
Final Exam	40%	To be announced

Description of Exams

Test questions will predominately come from material presented in the lectures. Semester exams will be conducted during the regularly scheduled lecture period. Exam will consist of a combination of multiple choice, short answer, match, true and false and/or descriptive questions.
Project: Will be given in the mid of the semester, worked through small groups, and submitted at the end of the semester before the final exam.

No make-up exams, homework or quizzes will be given. Only documented absences will be considered as per HU guidelines.

Grades are not negotiable and are awarded according to the following criteria*:

Letter Grade	Description	Grade Points
A+	Excellent	4.00
A		3.75
A-		3.50
B+	Very Good	3.25
B		3.00
B-		2.75
C+	Good	2.50
C		2.25
C-		2.00
D+	Pass	1.75
D	Pass	1.50
F	Fail	0.00
I	Incomplete	-

WEEKLY LECTURE SCHEDULE AND CONTENT DISTRIBUTION

"Lecture hours and weeks are approximate and may change as needed"

Topic Details	Reference	No. of Weeks	Contact hours*
Introduction to Business Data Analytics	Ch1	1	3
Business Data Analytics processes	Ch2	2	6
Business Data Analytics Tools	Ch3	3	9
Python Libraries-Jupyter	Ch4	4	12
Text Analysis	Ch5	2	6
Sentiment Analysis	Ch6	2	6
Project Presentations	-	1	3
Total		**15**	**45**

ASSESSMENT RUBRICS

Assessment Rubrics to be determined by the department.