

# Course Syllabus – IS574 Business Intelligence and Analytics

**Instructor:** Merri Beckfield [mbeckfie@depaul.edu](mailto:mbeckfie@depaul.edu)  
**Office Hours:** Thursday 4:00-5:30 PM CT (via Phone or Zoom)  
Other times via appointment  
**Class Sessions:** Online – Sync: Thursday 5:45-9:00 + Online - Async  
(Each week begins on Monday and ends the following Sunday)

This course introduces the concepts of business intelligence (BI) as components and functionality of information systems. It explores how business problems can be solved effectively by using operational data to create data warehouses, and then applying data mining tools and analytics to gain new insights into organizational operations. Detailed discussion of the analysis, design and implementation of systems for BI, including: the differences between types of reporting and analytics, enterprise data warehousing, data management systems, decision support systems, knowledge management systems, big data and data/text mining. Case studies are used to explore the use of application software, tools, success and limitations of BI as well as technical, managerial and social issues.

**PREREQUISITE(S):** See course catalog for current prerequisites.

## Required Text

No assigned textbook is used. Students are required to purchase one Harvard Business School case pack from <https://hbsp.harvard.edu/import/927083> (at a discounted price)

- Caterpillar Tunneling: Revitalizing User Adoption of Business Intelligence Frances Leung; Murat Kristal
- Managing with Analytics at Procter & Gamble (613045-PDF-ENG) Thomas H. Davenport; Marco Iansiti; Alain Serels

All the other reading materials are provided online available via Books 24X7 through the DePaul Library: <http://library.books24x7.com.ezproxy.depaul.edu/bookshelf.asp?>

- Business Intelligence Guidebook – From Data Integration to Analytics by Rick Sherman ISBN-13: 978-0124114616 ISBN-10: 012411461X
- Practical Text Mining by Gary Miner

## Grading

– Assignments	25 points
– Quizzes	20 points
– Project 1	40 points
– Project 2	40 points
– Case Studies	50 points
– Class Participation	<u>25 points</u>

Total Possible: 200 points

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## Grade Assignment Scale

– A	94.0% +	C+	77.0%
– A-	90.0%	C	73.0%
– B+	87.0%	C-	70.0%
– B	83.0%	D	60.0%
– B-	80.0%	F	less than 60%

## Assignments

Homework consists of assigned readings as well as supplemental materials. Details of each assignment, case study, and project will be posted on D2L. All assignments, case studies, and project deliverables are due on the due date associated with the submission folder. No credit can be earned when an item has been graded and returned to other students, when the solution has already been discussed in class, when an online discussion forum's time window has ended, or when an item has been turned in after the last class session.

**Late submissions will be penalized** unless prior arrangements have been made with the instructor. You will lose 25% of the possible credit if less than 1 week late, 50% of the credit if 1-2 weeks late, and 100% of the credit if more than 2 weeks late.

## Participation

In addition to online lectures and supporting Power Point Presentations, participation in online discussions is required as part of class attendance for this course. These will be posted to D2L will be **due by the end of day the following Monday**. For example, a discussion topic that opens on April 4th will close at 11:30 PM on April 11<sup>th</sup>. Discussion questions will be locked after the due date and no more posts/replies will be accepted. Posts and replies need to show depth of thought to get credit. One-word responses or short phrase responses will not earn credit. In general, to receive credit and show thought, posts will need to be a paragraph or more as a general guideline. In addition, just cutting and pasting content from other sources will not earn credit. The point is to share your thinking on a topic with the rest of the class. **In general, participation in a specific discussion question can earn up to 5 points.**

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### Course Schedule

Week	Week Start	Topics / Notes	Readings	Due
1	28-Mar	Course Overview; BI Overview	BI Guidebook Ch. 1	Introduction
2	4-Apr	BI Basics	BI Guidebook Ch. 4 Assigned Articles	Assignment 1 Discussion 1
3	11-Apr	Decision Making	Case Study 1	Discussion 2 Quiz 1
4	18-Apr	Managing BI Projects and Teams	BI Guidebook Ch. 15	Case Study 1
5	25-Apr	BI Requirements	BI Guidebook Ch. 3	Discussion 3 Quiz 2
6	2-May	BI Tools Project presentations	Assigned Articles	Project 1
7	9-May	BI Tools Data Visualization	Assigned Articles	Case Study 2
8	16-May	User Segmentation and Storytelling	BI Guidebook Ch. 13	Discussion 4 Quiz 3
9	23-May	Big Data	Practical Text Mining Ch. 1 & 2	Assignment 2
10	30-May	AI and Machine Learning	Assigned Articles	Discussion 5 Quiz 4
11	6-Jun	Final Projects	None	Project 2

# Course Syllabus – IS574 Business Intelligence and Analytics

## Policies

### Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

### Online Course Evaluations

Instructor and course evaluations provide valuable feedback that can improve teaching and learning. The greater the level of participation in the survey, the more useful the results will be. As students, you are in the unique position to view the instructor over time. Your comments about what works and what doesn't can help faculty build on the elements of the course that are strong and improve those that are weak. Isolated comments from students and instructors' peers may also be helpful, but evaluation results based on high response rates may be statistically reliable (believable). As you experience this course and material, think about how your learning is impacted. Your honest opinions about your experience in and commitment to the course and your learning may help improve some components of the course for the next group of students. Positive comments also show the department chairs and college deans the commitment of instructors to the university and teaching evaluation results are one component used in annual performance reviews (including salary raises and promotion/tenure). The evaluation of the instructor and course provides you and opportunity to make your voice heard on an important issue – the quality of teaching at DePaul. Don't miss this opportunity to provide feedback.

### Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. More information can be found at <http://academicintegrity.depaul.edu/>.

The university and school policy on plagiarism can be summarized as follows: Students in the course should be aware of the strong sanctions that can be imposed against someone guilty of plagiarism. If proven, a charge of plagiarism could result in an automatic F in the course and possible expulsion. The strongest of sanctions will be imposed on anyone who submits as his/her own work any assignment which has been prepared by someone else. If you have any questions or doubts about what plagiarism entails or how to properly acknowledge source materials be sure to consult the instructor.

### Withdrawal

Students who withdraw from the course do so by using the Campus Connection system <http://campusconnect.depaul.edu>. Withdrawals processed via this system are effective the day on which they are made. Simply ceasing to attend, or notifying the instructor, or nonpayment of tuition, does not constitute an official withdrawal from class and will result in academic and financial penalty.

Last Day to Drop with no penalty: April 8<sup>th</sup>, 2021

Last Day to Withdraw: May 13<sup>th</sup>, 2021

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### Retroactive Withdrawal

This policy exists to assist students for whom extenuating circumstances prevented them from meeting the withdrawal deadline. During their college career students may be allowed one medical/personal administrative withdrawal and one college office administrative withdrawal, each for one or more courses in a single term. Repeated requests will not be considered. Submitting an appeal for retroactive withdrawal does not guarantee approval.

College office appeals (for CDM students only) are rare. If a student believes he/she has an extenuating circumstance that warrants consideration of an exception, such an appeal must be [submitted online via MyCDM](#). The deadlines for submitting appeals are as follows:

Autumn Quarter: Last day of the last final exam of the subsequent winter quarter

Winter Quarter: Last day of the last final exam of the subsequent spring quarter

Spring Quarter: The end of the second week of the subsequent autumn quarter.

Summer Terms: Last day of the last final exam of the subsequent autumn quarter

### Incomplete Grades

A grade of “incomplete” is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. CDM policy requires the student to initiate the request for incomplete grade before the end of the term in which the course is taken. Prior to submitting the incomplete request, the student must discuss the circumstances with the instructor. Students may initiate the incomplete request process in [MyCDM](#).

- All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval.
- If approved, students are required to complete all remaining course requirement independently in consultation with the instructor by the deadline indicated on the incomplete request form.
- By default, an incomplete grade will automatically change to a grade of F after two quarters have elapsed (excluding summer) unless another grade is recorded by the instructor.
- An incomplete grade does NOT grant the student permission to attend the same course in a future quarter.

### Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.

To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at:

Lewis Center 1420, 25 East Jackson Blvd.

Phone number: (312)362-8002

Fax: (312)362-6544 TTY: (773)325.7296