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| **INTRODUCTION TO BUSINESS INTELLIGENCE (BIA 3713)** |
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| **Tentative Outline and Schedule\*** |  |  |  |
| **Date** |  | **Requirements** | **Activity**  |
| 8/23 | £ | Read | Course Syllabus, Schedule, and other documents posted on Canvas in "Start Here" module  |
|   | £ | Read | [Seven Use Cases for Data Science](https://medium.com/coriers/7-use-cases-for-data-science-and-predictive-analytics-e3616e9331f9) |
|   | £ | Read | [Disney Uses Big Data, IoT And Machine Learning To Boost Customer Experience](https://www.forbes.com/sites/bernardmarr/2017/08/24/disney-uses-big-data-iot-and-machine-learning-to-boost-customer-experience/#13eed3eb3387) |
|   | £ | Attend | **Class week 1: Welcome, introduction, course overview, key expectations, assessment, overview of digital world and business decision making, summary and key takeaways** |
| 8/26 23:59 | £ | Canvas upload 1/person | Experiences and Expectations post (under Discussions section on Canvas): Introduction, Experience, and Expectations |
| 8/30 | £ | Read | [Analytics Terms Business People Need to Know](https://www.forbes.com/sites/metabrown/2018/07/30/predictive-analytics-terms-business-people-need-to-know-no-hype-allowed/#29aebc823d43) |
|   | £ | Read | [Data Scientist: The Sexiest Job of the 21st Century](https://hbr.org/2012/10/data-scientist-the-sexiest-job-of-the-21st-century)  |
|   | £ | Attend | **Class week 2: Introduction to business analytics and key applications, summary and conclusion** |
| 9/6 23:59 | £ | Canvas upload 1/team | Weeks 1-2 summary and business applications presentation file (Team A) |
| 9/6 | £ | Read | [The Data Science Process](https://www.kdnuggets.com/2016/03/data-science-process.html) |
|   | £ | Team A. 7-10 mins | Weeks 1-2 summary and business applications presentation (Friday during live session) |
|   | £ | Attend | **Class week 3: Types of data and analytics, business applications, practice session, summary and conclusion** |
|   | £ | Live session | **Quiz #1 (Friday during live session)** |
| 9/13 23:59 | £ | Canvas upload 1/team | Week 3 summary and business applications presentation file (Team B) |
| 9/13 | £ | Read | [Cleaning Big Data: Most Time-Consuming, Least Enjoyable Data Science Task, Survey Says](https://www.forbes.com/sites/gilpress/2016/03/23/data-preparation-most-time-consuming-least-enjoyable-data-science-task-survey-says/?sh=71a36c6f6f63) |
|   | £ | Team B. 7-10 mins | Week 3 summary and business applications presentation (Friday during live session) |
|   | £ | Attend | **Class week 4: Descriptive analytics and business applications, practice session, summary and conclusion** |
| 9/20 23:59 | £ | Canvas upload 1/team | Week 4 summary and business applications presentation file (Team C) |
| 9/19 23:59 | £ | Canvas upload 1/person | Assignment #1 |
| 9/20 | £ | Read | [Pivot Tables (Part 1)](https://www.youtube.com/watch?v=9NUjHBNWe9M) |
|   | £ | Read | Pivot Tables (Part 2) |
|   | £ | Team C. 7-10 mins | Week 4 summary and business applications presentation (Friday during live session) |
|   | £ | Attend | **Class week 5: Graphical techniques and business applications, practice session, summary and conclusion** |
| 9/27 23:59 | £ | Canvas upload 1/team | Week 5 summary and business applications presentation file (Team D) |
| 9/27 | £ | Read | [Fundamentals of Descriptive Analytics](https://www.dataversity.net/fundamentals-descriptive-analytics/#:~:text=Here%20are%20some%20common%20applications,travel%20destinations%20or%20news%20trends.) |
|   | £ | Team D. 7-10 mins | Week 5 summary and business applications presentation (Friday during live session) |
|  | £ | Attend | **Class week 6: Numerical measures and business applications, practice session, summary and conclusion** |
| 10/3 23:59 | £ | Canvas upload 1/person | Assignment #2 |
| 10/4 | £ | Read | [Improve Business Success with Descriptive Analytics](https://www.solvexia.com/blog/improve-business-success-with-descriptive-analytics) |
|   | £ | Attend | **Class week 7: Data processing and business applications, practice session, summary and conclusion** |
| 10/11 23:59 | £ | Canvas upload 1/team | Weeks 6-7 summary and business applications presentation file (Team E) |
| 10/11 | £ | Watch | [Introduction to Dashboards](https://www.youtube.com/watch?v=FyggutiBKvU) |
|   | £ | Read | [Designing Dashboards and Metrics to Improve Thinking Under Pressure (Optional Reading)](https://www.kepner-tregoe.de/linkservid/DCD4D111-AE19-4CD0-9259EAD6BDA5F395/showMeta/0/) |
|   | £ | Team E. 7-10 mins | Weeks 6-7 summary and business applications presentation (Friday during live session) |
|   | £ | Attend | **Class week 8: Dashboards and business applications, summary and conclusion** |
|   | £ | Live session | **Quiz #2 (Friday during live session)** |
| 10/18 23:59 | £ | Canvas upload 1/team | Week 8 summary and business applications presentation file (Team F) |
| 10/17 23:59 | £ | Canvas upload 1/person | Assignment #3 |
| 10/18 | £ | Live session | **Week 9: Review and midterm (Part 1: Wednesday, Part 2: Friday) Live on Zoom** |
| 10/25 | £ | Read | [Ten Reasons Why You Need Google Analytics for Business Growth](https://www.j2store.org/blog/digital-marketing/10-reasons-why-you-need-google-analytics-for-business-growth.html) |
|   | £ | Team F. 7-10 mins | Week 8 summary and business applications presentation (Friday during live session) |
|   | £ | Attend | **Class week 10: Introduction to web analytics, summary and conclusion** |
| 11/1 23:59 | £ | Canvas upload 1/team | Weeks 9 and 10 summary and business applications presentation file (Team G) |
| 11/1 | £ | Read | [Machine Learning Applications for Business](https://blogs.oracle.com/datascience/6-common-machine-learning-applications-for-business) |
|   | £ | Team G. 7-10 mins | Weeks 9 and 10 summary and business applications presentation (Friday during live session) |
|   | £ | Attend | **Class week 11: Introduction to machine learning and business applications, summary and conclusion** |
| 11/8 23:59 | £ | Canvas upload 1/team | Week 11 summary and business applications presentation file (Team H) |
| 11/8 9:30 | £ | Read | [Why Use K-Means for Time Series Data?](https://dzone.com/articles/why-use-k-means-for-time-series-data-part-one) |
|   | £ | Team H. 7-10 mins | Week 11 summary and business applications presentation (Friday during live session) |
|   | £ | Attend | **Class week 12: Unsupervised learning and business applications, summary and conclusion** |
| 11/15 23:59 | £ | Canvas upload 1/team | Week 12 summary and business applications presentation file (Team I) |
| 11/14 23:59 | £ | Canvas upload 1/person | Assignment #4 |
| 11/15 | £ | Read | [Customer Segmentation & Cluster Analysis – Telecom Case Study](http://ucanalytics.com/blogs/customer-segmentation-cluster-analysis-telecom-case-study-example/) |
|   | £ | Team I. 7-10 mins | Week 12 summary and business applications presentation (Friday during live session) |
|   | £ | Attend | **Class week 13: Supervised learning and business applications, summary and conclusion** |
|   | £ | Live session | **Quiz #3 (Friday during live session)** |
| 11/29 23:59 | £ | Canvas upload 1/team | Week 13 summary and business applications presentation file (Team J) |
| 11/29 | £ | Read | [Linear Regression In Real Life](https://towardsdatascience.com/linear-regression-in-real-life-4a78d7159f16) |
|   | £ | Team J. 7-10 mins | Week 13 summary and business applications presentation (Friday during live session) |
|   | £ | Attend | **Class week 14: Supervised learning and business applications, summary and conclusion** |
| 12/5 23:59 | £ | Canvas upload 1/person | Assignment #5 |
| 12/5 23:59 | £ | Canvas upload 1/person | Peer rating form |
| 12/6 | £ | Attend | Final Exam Preparation Period (Review and Q/A) |
| 12/13 8:00 AM - 10:00 AM | £ | Live session | **Final exam (Comprehensive) (Synchronous/Live on Zoom)** |
| ***\* Changes may be made to the class schedule including topics, reading material, and/or due dates according to the discretion of the instructor*** |