

**Northeastern University  
College of Professional Studies  
Course Syllabus**

**Decision Support & Business Intelligence ALY 6060  
Once-week term**

ALY 6060  
Duration: 6 weeks  
Start date: January 10<sup>th</sup> 2018  
End date: February 14<sup>th</sup> 2018

**Location:** Dodge Hall/ Room 173  
**Meeting Days/Time:** Wednesdays at 17.50 – 20.00

Instructor Name: Prof. Uwe Hohgrawe, PhD  
E-mail: [u.hohgrawe@northeastern.edu](mailto:u.hohgrawe@northeastern.edu)

**Required Text(s)/Software/Tools:**

Randy Bartlett: A Practitioner's Guide to Business Analytics, Edition: 1<sup>st</sup>, McGraw-Hill Education, Print ISBN: 9780071807593, 0071807594; eText ISBN: 9780071807609, 0071807608, 2013

Thomas H. Davenport; Jeanne G. Harris: Competing on Analytics: The Science of Winning, Harvard Business School Press, ISBN-13:878-I-4221-0332-6, 2007

This course contains audio material: Lynda.com and <https://bigdatauniversity.com/>

In some instances, you may be asked to participate in audio-based activities, such as a Voice Discussion Board. A headset (headphones plus microphone) will allow you to hear and record audio. The Logitech ClearChat Comfort USB Headset, or the Plantronics Audio 470 or 500, or comparable brands/models, are recommended. Headsets can be purchased from online vendors such as amazon.com, bestbuy.com, or newegg.com.

**Course Prerequisites**

None

**Course Description**

Discusses the operationalization of analytics as well as the business partner concept. Introduces a variety of business analytical concepts and information technologies, with the focus on the application of data, information and insight to support decision-making. Introduces business intelligence technology and applications, and is discussing project management and ethical questions related to the application of data analytics.

**MPSA Program Student Learning Outcomes (SLOs)**

In this course students are *developing* skills that relate to Program SLOs 1-5.

Specialized Knowledge	Broad and Integrative Knowledge	Applied and Collaborative Learning	Civic and Global Learning	Experiential Learning
SLO 1	SLO 2	SLO 3	SLO 4	SLO 5
Integrate the major theories, tools, and	Articulate and effectively defend	Apply the principles, tools and methods of	Propose an effective path to resolution of	Apply the principles, tools and methods of

approaches in data analytics to identify and successfully communicate data-driven insights for informed decision-making.	the significance and implications of the work in data analytics in terms of challenges and trends in a local, national or global context.	analytics to a comprehensive real-world problem or project related to data analyses for tactical and/or strategic decision making; present data, information and/or analytical insights and recommendations for successful implementation of the project.	an analytical problem that may be complicated by the competitive environment, opposing interests, divergent or uncertain data and information.	analytics to a project within a sponsoring organization to successfully assist with the extraction, development, delivery, and/or translation/implementation of data analysis for tactical and/or strategic decision-making in organizations.
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## Course Outcomes

- List strategic planning activities that need to take place in a business intelligence initiative
- Anticipate and support decision making through the application of business intelligence in commercial operations
- Discuss the operationalization of analytics, including the business partner concept
- Create the conditions for successful analytics for business intelligence in the course of a new product launch
- Assist in solving organizational problems in data analytics using business intelligence that are complicated by competing interests
- Analyze some project management considerations and key ethical considerations that emerge in the context of building, reporting, and using business intelligence in a commercial operation
- Develop a foundation of hands-on usage of business intelligence tools like IBM Watson Analytics, Tableau and QlikView

## Course Methodology

Each week, you will be expected to:

1. Review the week's learning objectives.
2. Complete all assigned readings.
3. Complete all lecture materials for the week.
4. Participate in the Discussion Board.
5. Complete and submit all assignments and tests by the due dates.

## Participation/Discussion Board

The Discussion Board is a space for academic exchanges. As a result, you must check for proper and exacting punctuation, spelling, and grammar. In addition, you must reference all outside sources in correct citation format. It is crucial that all participants maintain a high regard for proper decorum in the Discussion Board.

Please treat your classmates and the instructors with the utmost respect. Inappropriate posts will be removed immediately. The instructor reserves the right to penalize students for repeated violations of the participation policy within a course.

In the discussion board and in class, high quality contributions advance the class discussions and do not simply summarize the material that was assigned. Quality contributions take into account not only the instructor's questions but also your classmates' contributions.

In addition to the criteria above and in the grading evaluation standards table below a few other notes around the discussion board in online or blended courses are listed below.

- Participation in the discussion board: each week students must post at least one “primary response” (answering a discussion question) and two secondary responses (responses to other students’ posts).
- The participation is worth 20% of the total course grade.
- Primary responses to the discussion board questions will be due by
  - 11.59pmEST on Friday each week.
- The primary response should consist of a minimum of 250 words, and replies should contain at least 50 words.
- Primary responses that are posted after Friday will not be accepted.
- A minimum of two replies to the primary posts of other students will be due
  - 11.59pmEST on Monday each week.
- Learners are expected to post their responses to the weekly discussion questions on at least two different days of the week so that there will be enough time for fruitful correspondences with the instructor and/or with other learners throughout the week.
- Last minute postings that are empty of substance and essence will result in significant point deductions.
- When responding to the Discussion forum, learners should support their comments with logical reasoning and with the techniques of data analysis. Simply stating that agree or disagree without further describing why will not be accepted as a valid discussion.
- Copying and pasting from any source into the discussion board is unacceptable.
- A minimum of one reference should be cited in each primary response.
- All discussions (on-line and in on-ground classes) will be graded by using the following criteria:
  - (i) Comprehension (20%)
  - (ii) Participation (40%)
  - (iii) Critical Thinking (20%)
  - (iv) Writing Mechanics and Citations (20%)

### Communication/Submission of Work

- To communicate your content-oriented inquiries and questions, please use the discussion board. For private questions, use Email.
- To view each assignment, go to the Assignment folder, and click on the View/Complete Assignment link.
- Use the View/Complete Assignment link, attach your completed assignment files (often consisting of an Excel workbook and a Word document), and click Submit to turn them in to me.
- Once your assignment has been graded, you will be able to view the grade and feedback I have provided by clicking on My Grades in the Tools module from the Northeastern University Online Campus tab.
- Completed assignments that are sent to me by Emails will not be accepted.

### Grading/Evaluation Standards

Assignment	Grade	Weight and Course Grade
5 Weekly Discussions – Discussion Board	200 points (40 points each)	20%
Weekly contribution to on ground Discussion	50 points total	5%
5 Weekly Essays/ppt.	250 (50 points each)	25%

Signature Assessment	500	50%
<b>Total</b>	<b>1000 points</b>	<b>100%</b>

### Weekly Projects:

The submission of each weekly essay and the lab will consist of a Word document and/or a ppt. For each weekly essay and the lab, students should complete their writing a minimum of 1000 words in a Word and/or ppt. document describing their findings. The document should consist of a title page (including student's name, assignment title, course number and title, the current academic term, instructor's name, and the assignment completion date), and a reference page. The submission of each essay will consist of three sections:

- i (i) Introduction
- ii (ii) Analysis
- iii (iii) Conclusion

### Signature Assessment:

Please see Assignment Section in the course for more detailed information.

### Milestones

Please see Milestone Section in the course for more detailed information.

### Class Schedule / Topical Outline

Week	Dates	Topic	Assignments
1	January 10 <sup>th</sup> – January 16 <sup>th</sup>	Questions and Culture	Fundamentally, Analytics is a People's business! Why would you agree, why would you disagree with this statement?
2	January 17 <sup>th</sup> – January 23 <sup>rd</sup>	Committed and Immersed	Discuss strategies that ensure continuous stakeholder involvement and commitment.
3	January 24 <sup>th</sup> – January 30 <sup>th</sup>	The Business Partner Concept	Discuss reasons for a Business Partner concept to fail, and activities on how to overcome the challenges that contributed to the problems.
4	January 31 <sup>th</sup> – February 6 <sup>th</sup>	Operationalizing and Embedding	Apply the requirements, rules, or recommendations that can guide organizations into successful implementations of embedded analytics by selecting a case study from your own work environment.
5	February 7 <sup>th</sup> – February 13 <sup>th</sup>	Analytics and Business Performance	Analytics Tools Applications Lab
6	February 14 <sup>th</sup> – February 17 <sup>th</sup>	Case Study	Explain the conditions for a successful Analytics organization and an action plan for Analytics in the course of a new product launch.

			<p>List and discuss the tactical and strategic planning activities that need to take place.</p> <p>Discuss some of the project management considerations and key ethical considerations you see emerge in the context of building, reporting, and using Business Intelligence in an organization.</p>
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## Grading Scale and Feedback Rubric

In the MPS in Analytics program, grades represent an important form of feedback to students. At the graduate level, our expectation is that students work will demonstrate a basic understanding of course concepts and address all the requirements of an assignment – this is the meaning of a ‘B/B+’ grade. To achieve a grade in the ‘A’ range, the work must thoroughly address aspects of the assignment and exceed the requirements of the assignment. See below the brief descriptions of what the letter grades mean.

Grading Scale	What It Means
<b>A (95-100%)</b>	Outstanding, insightful work. Goes beyond requirements of the task to develop a response, which is thoughtful, reflective, considers alternative views and makes connections among ideas and information from different sources or from different aspects of the course. Well researched and documented (if research is part of assignment). Displays creativity and originality.
<b>A- (90-94.9%)</b>	Very good work. Purposefully and logically developed. Thoroughly addresses all aspects of the task. Synthesis of details and concepts from various sources or topics shows evidence of sound understanding and thoughtful examination. Research information appropriately cited (if research is part of assignment).
<b>B+ (87-89.9%)</b>	Good work. Generally clear, accurate and relevant. Adequately addresses all requirements of the task. Demonstrates understanding of course concepts, with evidence of some thoughtful examination and reflection. Development is generally logical, facts generally correct. Tends to focus on one interpretation.
<b>B (84-86.9%)</b>	Satisfactory work. Shows basic understanding of concepts with minimal evidence of reflection or thoughtful analysis. Complies with the basic requirements, relies on limited sources of information, little integration of concepts.
<b>B- (80-83.9%)</b>	Minimally satisfactory work. Shows some understanding of concepts with little reflection or analysis. Barely meets basic requirements of assignment.
<b>C+ (77-79.9%)</b> <b>C (74-76.9%)</b> <b>C- (70-73.9%)</b>	Unsatisfactory work. Fails to address the topic in a meaningful way. May be extremely brief, inaccurate, illogical or undeveloped.
<b>F 69.9% or below</b>	

## Assignment Rubric (categories as applicable)

	Above Standards=4	Meets Standards=3	Approaching Standards=2	Below Standards=1
<b>Identification of issues</b>	Provides a well-focused diagnosis of all of the considerations and obstacles in building an analytics-driven culture; in project managing the launch in the context of building, reporting, and using analytics in the organization. Includes accurate and detailed descriptions of all of the problems that are compelling and insightful.	Identifies and outlines all of the considerations and obstacles in building an analytics-driven culture and in project managing the launch in the context of building, reporting, and using analytics in the organization. Includes accurate descriptions of all of the problems.	Identifies most of the considerations and obstacles in building an analytics-driven culture and in project managing the launch in the context of building, reporting, and using analytics in the organization. Includes the overview of most of the problems.	Does not identify the key considerations and obstacles in building an analytics-driven culture and in project managing the launch in the context of building, reporting, and using analytics in the organization. Does not include an overview or outline.
<b>Ethical Considerations</b>	Effectively assesses ethical issues in the context of building, reporting, and using analytics in the organization and considers alternate actions.	Assesses ethical issues in the context of building, reporting, and using analytics in the organization, and considers alternate actions with moderate effectiveness.	Assesses ethical issues in the context of building, reporting, and using analytics in the organization.	Is not able to assess ethical issues in the context of building, reporting, and using analytics in the organization, or consider alternate actions.
<b>Analysis and Evaluation of Issues</b>	Demonstrates extensive exploration of issues through the collection and analysis of evidence to make well-informed conclusions/judgments. Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus.	Demonstrates adequate exploration of issues through the collection and analysis of evidence to make informed conclusions/judgments. Organizes evidence to reveal important patterns, differences, or similarities related to focus.	Demonstrates minimal exploration of issues through the collection and analysis of evidence to make informed conclusions/judgments. Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities.	Does not demonstrate even minimal exploration of issues through the collection and analysis of evidence and unable to make informed conclusions/judgments. Lists evidence, but it is not organized and/or is unrelated to focus.
<b>Solutions or Strategies; Recommendations</b>	Effectively assesses a variety of tactical and strategic planning activities for a successful launch; proposes a well-justified and realistic action plan.	Presents a variety of tactical and strategic planning activities to address all of the issues central to the launch; proposes detailed and feasible action plan.	Summarizes some alternative tactical and strategic planning activities to address most of the issues central to the launch; proposes a detailed action plan.	Has difficulty identifying tactical and strategic planning activities to address the issues central to the launch; proposes action plan that is not detailed or feasible.
<b>Research</b>	Incorporates many scholarly resources effectively that reflect depth and breadth of research	Incorporates some scholarly resources effectively that reflect depth and breadth of research	Incorporates very few scholarly resources that reflect depth of research	Does not incorporate scholarly resources that reflect depth and breadth of research
<b>Critical Thinking</b>	Demonstrates comprehensive exploration of issues and ideas before accepting or forming an opinion or conclusion	Demonstrates moderate exploration of issues and ideas before accepting or forming an opinion or conclusion	Demonstrates minimal exploration of issues and ideas before accepting or forming an opinion or conclusion	Does not demonstrate exploration of issues and ideas before accepting or forming an opinion or conclusion
<b>Connections</b>	Integrates learned concepts by making strong connections (explain how or why) to personal experience or previous understanding.	Integrates learned concepts by making explicit connections (define) to personal experience or previous understanding.	Integrates learned concepts by making implicit connections (simply identify) to personal experience or previous understanding.	Does not integrate learned concepts by making connections to personal experience or previous understanding.
<b>Communicating with Data</b>	Uses data visualization tools effectively to design and deliver presentations, reports, and recommendations that effectively translate technical results/data solutions; are coherent and persuasive to different audiences; and can contribute to successful data driven decision making.	Uses data visualization tools to design and deliver presentations, reports, and recommendations that effectively translate technical results/data solutions; are coherent to different audiences and can contribute to data driven decision making.	Uses data visualization tools to design and deliver presentations, reports, and recommendations that effectively translate technical results/data solutions and are coherent.	Data visualization tools used to design and deliver presentations, reports, and recommendations does not effectively translate technical results/data solutions and not coherent or persuasive.
<b>Writing</b>	Uses clear language to accurately express abstract ideas and explain concepts. No errors related to organization, grammar and style, and citations.	Uses clear language to express ideas. Minor errors related to organization, grammar and style, and citations.	Some errors related to organization, grammar and style, and citations. Lack of clarity in writing.	Major errors related to clarity, accuracy, organization, grammar, style, and citations.

## Writing Quality

Analytics is a writing-intensive discipline (reports, presentations, etc.). Success depends in large measure on the ability to craft persuasive messages in a variety of genres. Therefore, students taking courses in the MPS in Analytics program must demonstrate the ability to write with clarity, coherence, proper grammar and mechanics, and accurate documentation of sources.

Even the most experienced, accomplished writers seek ways to polish their skills. This is why the College of Professional Studies offers students a variety of ways, on-ground at the Boston campus or online with Smarthinking, to seek feedback from writing specialists. We encourage students to take advantage of this feedback on writing assignments on a regular basis.

NOTE: Instructors in the MPS in Analytics use APA Formatting and Style Guide: <http://owl.english.purdue.edu/owl/resource/560/01/> Academic Integrity Guidelines should be applied in instances of careless or intentional documentation errors and plagiarism.

## Documentation Guidelines

The MPS in Analytics program requires the use of APA guidelines for citing sources. Why is proper citation important? It signals that every student is an active and informed participant in the College's academic community. It enables instructors to understand how sources are used to support perspectives and conclusions. And it forms the basis for ethical communication practices that are expected in a professional career in communications or any other field.

For these reasons, students are responsible for learning how to use proper APA citation methods. To do so, students can review APA guidelines on the Purdue Online Writing Lab website, or make an appointment with the International Tutoring Center or the Writing Center on the Northeastern campus. Students are encouraged to review this excellent interactive tutorial developed by the Harvard Graduate School of Education, with a focus on modules 2, 3, and 4: [http://isites.harvard.edu/icb/icb.do?keyword=apa\\_exposed](http://isites.harvard.edu/icb/icb.do?keyword=apa_exposed)

Failure to use APA guidelines to document sources will result in grade deductions. For a pattern of careless citation errors, the **maximum** possible grade a student can earn on that particular assignment (or section of an assignment) is 70% of the total possible points. For instances of plagiarism and other types of violations of academic integrity such as unauthorized collaboration with another student or submitting work from a prior course, the **maximum** possible grade a student can earn on that particular assignment is 50%, as well as possible referral to the Office of Student Conduct and Conflict Resolution.

Each paper need to be handed in in via Turnitin; every paper that contains more than 20% non-original material will not be accepted.

### **Late Submission of Work**

Each assignment is due on the date indicated - late assignments will not receive any points. There are no make-up dates, extensions, or re-works for the assignments after they are handed in, except for documented personal emergencies or special permission granted by the instructor in writing. Special permission must be requested in writing to the instructor at least two days prior to the due date of the assignment.

### **Attendance/Tardiness**

As the weekly class session is a vital part of the learning experience, all students are expected to attend every week, be on time for the start of class, and stay until the end of class.

However, in the event of extraordinary, legitimate and unavoidable situations, students may be excused for lateness or absence. Extraordinary, legitimate and unavoidable situations include personal illness, urgent family business, work-related issues, transportation-related issues, religious requirements. If at all possible, students should let the instructor know by e-mail about the excused absence or lateness before class.

### **Academic Integrity Policy**

The University views academic dishonesty as one of the most serious offenses that a student can commit while in college and imposes appropriate punitive sanctions on violators. Here are some examples of academic dishonesty. While this is not an all-inclusive list, we hope this will help you to understand some of the things instructors look for. The following is excerpted from the University's policy on academic integrity; the complete policy is available on the [Office of Student Conduct and Conflict Resolution web page](#).

*Cheating* – intentionally using or attempting to use unauthorized materials, information or study aids in an academic exercise

*Fabrication* – intentional and unauthorized falsification, misrepresentation, or invention of any data, or citation in an academic exercise

*Plagiarism* – intentionally representing the words, ideas, or data of another as one's own in any academic exercise without providing proper citation

*Unauthorized collaboration* – instances when students submit individual academic works that are substantially similar to one another; while several students may have the same source material, the analysis, interpretation, and reporting of the data must be each individual's independent work.

*Participation in academically dishonest activities* – any action taken by a student with the intent of gaining an unfair advantage

*Facilitating academic dishonesty* – intentionally or knowingly helping or attempting to violate any provision of this policy

For more information on Academic Integrity, including examples, please refer to the [Office of Student Conduct and Conflict Resolution web page](#).

## **College of Professional Studies Policies and Procedures**

For comprehensive information, please see the [Registrar University Catalogs page](#) as well as the [Student Resources](#) page of the [Northeastern University College of Professional Studies](#) website.

## **Student Accommodations**

Northeastern University and the Disability Resource Center (DRC) are committed to providing disability services that enable students who qualify under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act Amendments Act (ADAAA) to participate fully in the activities of the university. To receive accommodations through the DRC, students must provide appropriate documentation that demonstrates a current substantially limiting disability.

For more information, visit [the Disability Resource Center Getting Started page](#).

## **End-of-Course Evaluation Surveys**

Your feedback regarding your educational experience in this class is very important to the College of Professional Studies. Your comments will make a difference in the future planning and presentation of our curriculum.

At the end of this class, please take the time to complete the evaluation survey at [the NEU EvaluationKit website](#). Your survey responses are **completely confidential**. Surveys will be open for the last two weeks of the class. An email will be sent to your HuskyMail account notifying you when surveys are available.

## **Online Proctoring**

In this class, some tests may be administered remotely by an online authentication and proctoring service called Examity®, which gives you the flexibility to schedule exams at your convenience and take them wherever you want.

To prepare for using Examity®, you will need to meet the following technical requirements:

- Working webcam and microphone which can be tested at [www.testmycam.net](http://www.testmycam.net)
- An Internet connection of at least 3Mbps ([www.speedtest.net](http://www.speedtest.net))
- Chrome/ Mozilla/ Safari/ Internet Explorer/ Microsoft Edge browser
- Up to date Operating system (Windows or Mac OS)



Please click on the link below to run an automated systems check:

[Examity Computer Readiness Check](#)

If you do not pass the systems check or have any questions or concerns, you can contact Examity's® technical support team 24/7 via email at [support@examity.com](mailto:support@examity.com) or phone at (855) 392-6489. Please tell your instructor immediately if your computer/equipment does not meet the standard to use online proctoring.

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