



# Northeastern University

## College of Professional Studies

### Course Syllabus

#### Course Information

Course Title: EDU6336.81167 Data Literacy

Quarter: Spring

4 Quarter Hours

Course Format: Online

NU Online Login URL: <https://canvas.northeastern.edu/>

#### Instructor Information

Name: Liz Bergeron, PhD

Email: [b.elizabeth@neu.edu](mailto:b.elizabeth@neu.edu)

Office Hours: weekly Wednesday & Thursday 6pm to 7pm; by appointment

#### Technical Requirements

Courses are available on Northeastern University's Canvas at the following link:

<http://canvas.northeastern.edu>. Canvas Technical support and resources including 24/7 phone (1-833-450-3937), and chat can be found on the help icon in Canvas. Northeastern Technical support can be accessed at 617-373-4357 (xHELP) or [help@northeastern.edu](mailto:help@northeastern.edu).

Each student is responsible for his or her access to the internet for purposes of this course and for research. Internet access is a required component of this course and will not be accepted as an excuse for missed work. If you know that you will be traveling, then make sure you plan accordingly.

*Note regarding e-mail/voicemail:* If you e-mail, please include your name and class title. Please allow up to 48 hours for an email reply. If you leave a voicemail, please remember to include your name, class title, and phone number.

#### Course Prerequisites

None

#### Course Description

Data literacy is the ability to effectively access, understand, use, and communicate data in both visual and narrative form. This course provides a foundation for practitioners and leaders, from traditional and non-traditional learning environments, whose roles depend on data-centric thinking skills. It focuses on interpreting, evaluating, and communicating data effectively, three skills that support data-driven decision-making. It also examines the implications of using data to inform decisions from ethical, cultural, and diversity/inclusion perspectives. Students will work with use cases from their own disciplines/career fields and build their data storytelling skills by employing both narrative and visual methods.

## Course Materials

Jones, Ben. (2015). *Data Literacy Fundamentals* (2020). USA: Data Literacy Press. ISBN-13: 978-1733263429

## LXDT Program Learning Outcomes

***Learning Experience Design and Technology graduates will be prepared to:***

**PLO1:** Apply learning design models, theories, practices, and technologies, based on the analysis of context, content, and learner needs, to develop engaging learning environments. (*Learning Experience Design*)

**PLO2:** Demonstrate constructive working relationships and collaborations in a range of professional contexts while responding to the nuances of organizational culture, diversity of learners, project demands, and allocated resources. (*Collaboration*)

**PLO3:** Redesign learning experiences to create dynamic technology-enhanced and engaging environments by seeking out the learning design potential of new technologies. (*Learning Design Technologies*)

**PLO4:** Demonstrate the ability to effectively present ideas in multiple mediums and to diverse audiences. (*Communication*)

**PLO5:** Create learning designs that promote social justice, inclusion, and the building of intercultural and global networks, while demonstrating the capacity to perceive multiple perspectives. (*Cultural Responsiveness*)

**PLO6:** Respond innovatively to the learning design opportunities and challenges in diverse contexts of industry sectors and modalities, while creatively drawing upon the latest research in learning design. (*Creative Problem Solving & Systems Thinking*)

## Course Learning Outcomes

Students will have the opportunity to:

CLO1: Demonstrate the use of data sources and data collection methods in analyzing learner, context, and content needs;

CLO2: Analyze learning outcomes, assessments, and rubrics to appraise learner performance;

CLO3: Critique an evaluation plan that is aligned with a specific learner and/or learning context; and

CLO4: Employ data exploration and analysis methods to support data visualization storytelling.

**Earning Badges at Northeastern University:** In this course, you have the option to receive a digital *Data Literacy* Level 3 badge from Northeastern University. A digital badge is a validated acknowledgement of learning in the form of a small icon you can upload and share to the social and professional networks of your choosing. By clicking on the badge, viewers can see a full description of the proficiencies you have gained and demonstrated. The badge offers validation of your learning achievement from Northeastern and is provided to you at no cost. At the conclusion of the course, students with a final grade of B or better will receive an email from Acclaim, Northeastern's licensed badging platform, with detailed instructions on how to claim and share their badge.

**Building your ePortfolio:** As you progress through your program of studies, in each course you will incorporate one or more “signature assignments” into your ePortfolio (assignments are designated in the syllabus). The LXDT program has identified competencies that are essential to your success as education professionals (see Program Learning Outcomes on previous page). The ePortfolio provides evidence of your progress toward competencies and creates opportunities for reflecting on and improving your work in this regard. **Note:** Creation of an ePortfolio is a requirement for GSE masters’ students and optional for certificate students.

**Attendance Policy:** Students in online courses are expected to complete course readings, participate in class discussions or other learning activities during the unit, and complete written assignments for each unit during the time of that unit.



**Course Outline:** (NOTE: Readings and activities are subject to change. See course site each week for updates)

Week	Topic	Readings & Assignments
1 April 11	Defining Data	Jones Chapters 1-2 Readings as assigned in Canvas  Book Club: select book
2 April 18	Ethical Use of Data	Readings as assigned in Canvas Book Club readings- start your book
3 April 25	Using Data - Part 1	Jones Chapter 3  Readings as assigned in Canvas  Book Club readings and book club Meeting!  Start Assignment 1
4 May 2	Using Data - Part 2	Book Club readings Readings as assigned in Canvas
5 May 9	Types of Data- Part 1	Jones Chapter 4 Readings as assigned in Canvas  Observe, Collect, Draw Assignment (assignment #1) Due Friday, May 13 <sup>th</sup> (week 5)  Book Club readings and Book Club Meeting!
6 May 16	Types of Data- Part 2	Book Club readings Readings as assigned in Canvas
7 May 23	Data Collection – Part 1	Book Club readings Readings as assigned in Canvas

8 May 31	Data Collection – Part 2	Book Club Assignment (#2) Due Friday, June 3 <sup>rd</sup> (week 8)  Readings as assigned in Canvas  Book Club groups meet
9 June 6	Data Analysis – Part 1	Jones Chapter 5 Readings as assigned in Canvas
10 June 13	Data Analysis – Part 2	Readings as assigned in Canvas
11 June 20	Communicating With Data	Jones Chapter 6-7 Readings as assigned in Canvas
12 June 27	Application of Data Literacy in practice	Data plan Assignment Due (#3)

## Assignments

### *Assignment 1 (20%) – Due week 5*

Create a drawing of data from your life! Inspired by Lupi and Posavec's *Observe, Collect, Draw* you will create a drawing based on observations from your life. You will also explore rubric creation and alignment between learning activities, targets, and assessment.

### *Assignment 2*

#### *The Book Club and Book Review (25%) – Due week 8*

During the quarter students will engage in a virtual book club and write a formal book review essay. Students will select a book from a provided list of options, conduct a book club in an assigned group and then submit individual book reviews.

### Assignment 3

#### *Signature Assignment: Data Report and Presentation (30%)- Due week 12*

This assignment requires you to create a data collection, analysis, reporting, and visualization plan for either 1) a change idea, 2) problem of practice, 3) learner outcomes, or 4) program evaluation using improvement science methods, liberatory design, action research, survey methodologies, or backward design.

### *Assignment 4*

### *Discussion and Collaboration (25%) – Weekly, as assigned*

Students are expected to participate in class discussion through the forums. Posts are due no later than 11:59 p.m. EDT on Friday. Responses are not required. Discussion boards will be used as a workspace to process and share draft thinking as you work towards learning targets.

### **Grading**

Grading will reflect student progress on learning targets. Progress will be assessed formally through four assignments. Grades will be assigned based on the rubric for each assignment. Students may resubmit assignments within 2 weeks of the due date to earn back any points deducted.

### **Graduate Programs Grading Scale**

95-100%	A	87-89.9%	B+	77-79.9%	C+	69.9% or below	F
		84-86.9%	B	74-76.9%	C		
90-94.9%	A-	80-83.9%	B-	70-73.9%	C-		

### **Policy on late work**

Students must submit assignments by the deadline in the time zone noted in the syllabus.

Students must communicate with the faculty prior to the deadline if they anticipate work will be submitted late. Each assignment is due on the date indicated. Each assignment is graded based on the course learning objectives. Points are not deducted for late work because turning assignments in on time is not a learning objective for this course. However, submission of late work will delay feedback and make it harder to resubmit if needed and delay progress on learning targets.

### **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 course, please take the time to complete the evaluation survey at

<https://neu.evaluationkit.com>. Your survey responses are **completely anonymous and confidential**. For courses 6 weeks in length or shorter, surveys will be open one week prior to the end of the courses; for courses greater than 6 weeks in length, surveys will be open for two weeks. An email will be sent to your HuskyMail account notifying you when surveys are available.

### **Academic Integrity**

A commitment to the principles of academic integrity is essential to the mission of Northeastern University. The promotion of independent and original scholarship ensures that students derive the most from their educational experience and their pursuit of knowledge. Academic dishonesty violates the most fundamental values of an intellectual community and undermines the achievements of the entire University.

As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, examinations of whatever kind, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Students are responsible for learning the conventions of documentation and acknowledgment of sources in their fields. Northeastern University expects students to complete all

examinations, tests, papers, creative projects, and assignments of any kind according to the highest ethical standards, as set forth either explicitly or implicitly in this Code or by the direction of instructors.

Go to <http://www.northeastern.edu/osccr/academic-integrity-policy/> to access the full academic integrity policy.

CPS expects independent and original work. Dishonesty and/or carelessness violates fundamental values of an intellectual and professional community and will be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) as a violation of the Academic Integrity Policy. To safeguard the integrity of assignments and programs, your course may use systems such as TurnItIn, which checks written work, and Examity, an online exam proctoring system. Work that contains academic integrity violations (AIV) will be graded on a case by case basis. Work displaying AIV may earn a failing grade, a zero, or even result in the instructor assigning the student a failing grade for the class. Students may not withdraw from a class to avoid the grade penalty for serious academic integrity violations.

For additional information or for answers to frequently asked questions, please visit:

<https://cps.northeastern.edu/academic-resources/academic-integrity>

You may also email [CPS-AcademicIntegrity@northeastern.edu](mailto:CPS-AcademicIntegrity@northeastern.edu).

### **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 the Disability Resource Center (DRC) with appropriate documentation that demonstrates a current substantially limiting disability.

For more information, visit <http://www.northeastern.edu/drc/getting-started-with-the-drc/>.

### **Library Services**

The Northeastern University Library is at the hub of campus intellectual life. Resources include over 900,000 print volumes, 206,500 e-books, and 70,225 electronic journals.

For more information, visit <http://library.northeastern.edu/>.

### **Northeastern University Online Blackboard Technical Help**

Get immediate 24/7 technical support for NU Online by calling 855-836-3520 or visiting the online [Support Center](#). Support via e-mail is also available within one business day at [NUOnline@neu.edu](mailto:NUOnline@neu.edu).

### **Catalog**

The College of Professional Studies Undergraduate Catalog is a reference/resource with information about curricula, resources, and academic and student policies.

For more information, visit <http://www.cps.neu.edu/student-resources/>.

### **Diversity and Inclusion**

Northeastern University and the Office of Institutional Diversity and Inclusion (OIDI) is committed to equal opportunity, affirmative action, diversity and social justice while building a climate of inclusion on and



beyond campus. In the classroom, member of the University community work to cultivate an inclusive environment that denounces discrimination through innovation, collaboration and an awareness of global perspectives on social justice.

Please visit <http://www.northeastern.edu/oidi/> for complete information on Diversity and Inclusion

## **TITLE IX**

*Title IX of the Education Amendments of 1972 protects individuals from sex or gender-based discrimination, including discrimination based on gender-identity, in educational programs and activities that receive federal financial assistance.*

Northeastern's Title IX Policy prohibits sex and gender-based discrimination, including sexual harassment, sexual assault, sexual exploitation, relationship or domestic violence, and stalking. The Title IX Policy refers to sex and gender-based discrimination as "Prohibited Offenses." The Title IX Policy applies to the entire Northeastern community, including students, faculty and staff of all gender identities.

Allegations of Prohibited Offenses can be reported to the Title IX Coordinator within **The Office for University Equity and Compliance** at: [titleix@northeastern.edu](mailto:titleix@northeastern.edu) and/or through **the Northeastern University Police Department (NUPD)** by phone: for an Emergency 617.373.3333; for Non-Emergency 617.373.2121.

Reporting to NUPD does **NOT** commit the victim/affected party to future legal action.

Faculty members are considered "responsible employees" at Northeastern University, meaning they are required to report all reports of and information about alleged Prohibited Offenses to the Office for University Equity and Compliance.

If you or someone you know has experienced a Prohibited Offense, **confidential** support and guidance can be found through **ViSION Resource Center (VRC)** staff

(<http://www.northeastern.edu/vision/visionresourcecenter/>), **University Health and Counseling Services (UHCS)** staff (<http://www.northeastern.edu/uhrs/>) and the **Center for Spiritual Dialogue and Service (CSDS) clergy members** (<http://www.northeastern.edu/spirituallife/>). Employees within the VRC, UHCS, and CSDS are not required to report allegations of Prohibited Offenses to the Office for University Equity and Compliance.

In case of an emergency, please call 911 OR NUPD'S Emergency line: 617-373-3333.

Please visit [www.northeastern.edu/titleix](http://www.northeastern.edu/titleix) for a complete list of reporting options and **resources, both on- and off-campus.**

## **Northeastern University Online Copyright Statement**

Northeastern University Online is a registered trademark of Northeastern University. All other brand and product names are trademarks or registered trademarks of their respective companies.

This course material is copyrighted and Northeastern University Online reserves all rights. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual, or otherwise, without the express prior written permission of Northeastern University Online.

The instructor reserves the right to amend this syllabus, both online and the document itself, during the term and will notify students of the change(s). The revised syllabus is the official record of class policies and schedule of due dates