

Instructor, Course Information & Objectives

Advanced Academic Programs
Zanvyl Krieger School of Arts and Sciences Johns Hopkins University
Performance Analytics: Tools & Techniques AS.470.901

Instructor Information

Instructor: Beth Blauer, Executive Director at the Johns Hopkins University Center for Government Excellence

Email Address: govex@jhu.edu

Office Hours: To arrange a time to meet, please email govex@jhu.edu

Weekly virtual office hours are tentatively scheduled to be held each Thursday at 7 p.m. - 8 p.m. ET.

Course Description

This online course, developed by the Center for Government Excellence at Johns Hopkins University, is designed as an introduction to open data and performance analytics principles and their applications in government. Drawing on best practices from successful programs, it is intended to provide foundational knowledge as well as practical, real-world examples and tools that you can use to strengthen your city's open data and performance analytics programs and develop innovative solutions to improve government services.

Course Goals & Learning Objectives

By the end of this course, you will be able to:

- Leverage data to improve budget, operational, and policy decision making
- Foster a culture of data-based decision making within your city
- Develop innovative solutions to common problems
- Share your data story with internal and external stakeholders

What to Expect in this Course

This online course consists of eight sessions which are each a week in length. Each session consists of recorded videos, recommended readings and resources, reflection questions, and learning activities to help you apply the course material to your organization. Each session should take approximately 60-90 minutes to complete. For each session, you will have three components to complete: (1) view a pre-recorded video and/or multimedia presentation, (2) complete a learning activity, and (3) contribute to an online discussion and/or participate on the weekly live virtual "office hours". You will receive weekly written feedback on your exercises from the instructional team.

Each session begins on a Saturday and ends the following Friday. Responses to online discussion questions should be posted **by 11 p.m. EST on Wednesdays**. Completed learning activities should be submitted **by 11 p.m. EST on Sundays**. The weekly virtual "office hours" are tentatively scheduled to be held **each Thursday at 7 p.m. - 8 p.m. ET**.

To gain the most value from the course, we encourage you to keep current on the weekly lessons, exercises, and discussion. **The final deadline for submission of all exercises will be 11 p.m. EST on Sunday after the final session.** In order to successfully complete the course, you must complete all **three** components (view video presentation, complete and submit exercise, and participate on online discussion and/or office hours) for each session. Course completion will be evaluated on a pass/fail basis. You will be evaluated in four areas: class participation, quality of class assignments, completion of course requirements, and professionalism. Upon successful completion of the course you will receive a Johns Hopkins University Certificate of Completion.

Since this is primarily an online course, we encourage you to actively engage in online discussions and interact with the instructors and other students by posting to and commenting on topics via the online discussion board and by participating in the **optional**, weekly live virtual "office hours".

Course Topics

Part 1: Overview

Session 1: Overview of Open Data & Performance Analytics

The course will begin with an overview of open data and performance analytics and how they can be used in cities to improve the quality of life for residents. You will gain an understanding of the principles of these methods. Topics will include: foundational concepts of open data and performance analytics, data policies and platforms, data portals, and open-source versus Software as a Service (SaaS) solutions.

Part 2: Establishing an Ecosystem

Session 2: Creating Compelling Forums for Decision Making

This session will present guidelines and examples for the establishment of a performance analytics program powered by data. Topics will include: defining your city or department's priorities, identifying key participants within the organization, and presenting and sharing data in meaningful formats such as STAT meetings, budget forums, and online visualizations.

Session 3: Culture Change

This session will cover how to be an effective champion for this work and create internal demand for data-based decision making within the organization.

Session 4: Applying your Framework to Real World Problems

Once you have established your open data and performance analytics program, how will you begin to use it to address city issues? This session will explore the process of identifying opportunities to use your framework to address key challenges. The discussion will also include goal setting and the importance of generating valuable, usable data.

Session 5: Stakeholder Engagement

This session will help cities understand how to leverage and engage external stakeholders to strengthen its open data and performance analytics programs. You will also discuss best practices around engaging a city's community in problem-solving.

Part 3: Practical Applications

Session 6: Data in Action - Examples from the Field (Part 1)

This session will use real-world examples to illustrate how an open data and performance analytics program can be used to address the following scenarios: bottlenecks/process problems, facility/staff optimization, and identifying opportunities for cost savings.

Session 7: Data in Action, Examples from the Field (Part 2)

This session will use real-world examples to illustrate how an open data and performance analytics program can be used to address the following scenarios: leveraging data for development, predictive servicing, and demand analysis.

Session 8: Putting It All Together

The course will conclude with a discussion on measuring the impact of a city's open data and performance analytics program. You will have the opportunity to share your city's successes and/or challenges; as well as to ask questions.

Course Materials

Recommended Readings & Resources

There is no course text for this course. Recommended readings and additional print and online resources for each session will be posted in the online classroom and available through the University's e-Reserves. While these readings are not required, you are strongly encouraged to refer to them to enhance and expand your learning.

You are also encouraged to review the additional resources available for reference published by the [Johns Hopkins University Center for Government Excellence](#).

Specific Technology Requirements & Skills for this Course

You are expected to be **at least** moderately experienced and proficient in using MS Excel for data calculations.

In addition, you should have a basic knowledge of computer technology required to participate in an online course. At a minimum, you need to be able to:

- Navigate in and use Blackboard; the Blackboard Student Orientation course on your “My Institution” page
- Create and save MS Word documents; see [MS Word tutorials](#) for PC users (all versions); [Word Help](#) for Mac users
- Find basic resources on the Internet
- Create and organize files & folders on your computer
- Send, receive, and manage email

Network Etiquette (i.e. “Netiquette”)

In this course, online discussion will be primarily take place in our online discussion board. In all textual online communication it’s important to follow proper rules of netiquette.

The Netiquette “Core Rules” linked below are a set of general guidelines for cyberspace behavior. They probably won't cover all situations, but they should give you some basic principles to use in communicating online.

For Netiquette Core Rules visit [The Core Rules of Netiquette](#) web page.

Directions for Students

Next Steps: Carefully review all of the syllabus information for this course before beginning Session 1 activities, which are located in the **Lessons** folder in your online course.

- Once you feel that you are ready to dive into the first sessions activities, click on the **Lessons** button on the left-side navigation. Then, click on **Session 1** and begin with the Introduction and Objectives.

University Policies

General

This course adheres to all University policies described in the academic catalog. Please pay close attention to the following policies:

Students with Disabilities

Johns Hopkins University is committed to providing reasonable and appropriate accommodations to students with disabilities. Students with documented disabilities should contact the coordinator listed on the [Disability Accommodations](#) page. Further information and a link to the Student Request for Accommodation form can also be found on the [Disability Accommodations](#) page.

Ethics & Plagiarism

JHU Ethics Statement: The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty, and unfair competition. Report any violations you witness to the instructor.

Read and adhere to JHU's [Notice on Plagiarism](#).

Dropping the Course

You are responsible for understanding the university's policies and procedures regarding withdrawing from courses found in the current catalog. You should be aware of the current deadlines according to the [Academic Calendar](#).

Getting Help

You have a variety of methods to get help. Please consult the help listed in the "Blackboard Help" link in the online classroom for important information. **If you encounter technical difficulty in completing or submitting any online assessment, please immediately contact the designated help desk listed on the [AAP online support page](#).** Also, contact your instructor at the email address listed atop this syllabus.