



NYU

**ROBERT F. WAGNER GRADUATE
SCHOOL OF PUBLIC SERVICE**

PADM-GP 2144

Debt Financing and Management for Public Organizations Fall 2022

Instructor Information

- Professor Laurence H. Wadler
- Email: lhw5@nyu.edu
- Phone: (201) 486-4242
- Office Hours: Thursday 10:00am – 1:00pm and by appointment.
- Supplemental Workshops: Voluntary - to be coordinated with interested students.

Course Information

- Class Meeting Times: Tuesdays 4:55pm – 6:35pm
- Silver – Room 411
- Office Hours Location: Professor Wadler's NYU Zoom Room:
 - nyu.zoom.us/my/nyulhw5
 - Password: ClassX

Course Description

We will be studying the issuance and management of debt by state and local governments from both a programmatic and transactional perspective during a period of historic change in the public finance markets. We will track the evolution of a bond transaction from the identification of financing need through the issuance of publically and privately sold debt. We will explore typical municipal debt structures with a focus on how they relate to the governmental purpose being financed. We will use EXCEL to model both the debt structures and the core calculations used in public finance to evaluate transactional performance. We will study in detail the primary offering document (the "Official Statement") used to market municipal debt to investors. We will learn how to use the EMMA (Electronic Municipal Market Access) website sponsored by the Municipal Securities Rulemaking Board.

We will explore these topics with a special focus on the perspective of the public officials responsible for managing their municipality's bond issuance programs. We will also study the concerns of other participants in the municipal securities marketplace including investment bankers, credit rating analysts, investors, regulators, bond attorneys and the federal officials.

Course and Learning Objectives

We approach this course during one of the most dynamic periods in the history of the capital markets. The 2020 pandemic is having a dramatic impact on how municipalities and not for profit institutions finance their operations. At the same time, emerging market nations around the world are attempting to establish the public and private sector frameworks needed to access the capital markets and expand financing options for critical infrastructure, health care, and economic development projects during a period of historic environmental and social need.

The primary objectives of this course are:

- (1) to develop an understanding of the role of each participant in the debt issuance/capital markets process,
- (2) to develop fixed income cash flow modelling capability relevant to the type of debt being issued by public finance entities,
- (3) to develop the ability to read and interpret bond and note offering statements and related transaction documents, and
- (4) to develop the fundamental understanding needed to be effective and forceful leaders in this new world of governmental project financing.

Learning Assessment Table

Course Learning Objective Covered	Corresponding Assignment Title
(1) and (2)	Homework Assignments
(3) and (4)	Term Project and Final

Course Website

The course website resides on the NYU Brightspace system and is accessible via the “Academics” tab on NYU Home.

Assignment and Grading

- Two homework assignments: 30%
- Term Project: 40% (Can be individual or small groups)
- Take-home final: 30%

The Term Project can be either a research paper relating to any topic relevant to the course or a structured finance project that I will tailor to your specific area of interest.

Required Readings

I have assigned chapters from the following works. All four have been ordered at the NYU Bookstore and are also available in print and in digital format from Amazon.

- Securities Industry and Financial Markets Association (SIFMA), **Fundamentals of Municipal Bonds**, 6th Ed., Wiley, 2012.
- Niall Ferguson, **The Ascent of Money: A Financial History of the World: Tenth Anniversary Edition**, Penguin Books, 2009.
- Alice Rawsthorn and Paola Antonelli, **Design Emergency – Building a Better Future**, Phaidon Press, 2022
- Edward R Tufte, **The Visual Display of Quantitative Information**, Graphics Press, Cheshire, Connecticut (Recommended but not required).

Additional readings of interest will be assigned on a weekly basis and made available on the Course Website.

Academic Integrity

Academic integrity is a vital component of Wagner and NYU. All students enrolled in this class are required to read and abide by [Wagner's Academic Code](#). All Wagner students have already read and signed the [Wagner Academic Oath](#). Plagiarism of any form will not be tolerated and students in this class are expected to report violations to me. If any student in this class is unsure about what is expected of you and how to abide by the academic code, you should consult with me.

Attendance

I will not be keeping track of attendance but strongly encourage you to attend all classes in order that you can achieve a full and proper understanding of the course material. This is especially important for this course owing to the dynamic nature of the critical matters being discussed.

Detailed Course Overview

Class 1 – September 6

Introduction

Topics:

- Syllabus Review
- Readings
- Overview of Course Objectives
- Discussion on the Nature of Finance (Finance as Convention)

- Financing Objectives
- Typical Phases of a Municipal Bond Transaction

Readings:

- Ferguson, Introduction and Chapter 1, Dreams of Avarice
- Fundamentals of Municipal Bonds, Chapter 1, Overview of Municipal Market

Class 2 – September 13

Overview of Public Finance Market

Topics:

- Discussion of readings
- Basic Public Finance vocabulary
- Issuers
- Market participants
- Size
- Introduction to Official Statements

Readings:

- Ferguson, Chapter 2, Of Human Bondage
- Fundamentals of Municipal Bonds, Chapter 2, The Basics of Municipal Securities

Class 3 – September 20

Basics of Municipal Securities

Topics:

- Discussion of readings
- Methods of sale
- Types of investors
- Tax exemption
- Credit rating
- Introduction to EMMA
- Understanding day count basis

Readings:

- Ferguson, Chapter 3, Blowing Bubbles
- Fundamentals of Municipal Bonds, Chapter 3, The Issuers

Class 4 – September 27

Introduction to Transaction Modelling

Topics:

- Discussion of readings
- Overview of forces that shape municipal transactions
- Initial cash flow, price, and yield discussion
- Interest compounding
- EXCEL examples

Homework #1 Distributed

Readings:

- Ferguson, Chapter 4, The Return of Risk
- Fundamentals of Municipal Bonds, Chapter 4, The Primary Market

Class 5 – October 4

Debt structure

Topics:

- Discussion of readings
- Homework #1 review
- Basic municipal debt structural forms
- EXCEL examples
- DBC Finance as tool for sizing and structuring transactions

Homework #1 Due

Paper Topic Due

Readings:

- Ferguson, Chapter 5, Safe as Houses
- Fundamentals of Municipal Bonds, Chapter 7, Credit Analysis

Class 6 – October 18

Governance and Public Finance

Topics:

- Discussion of readings

- Guest lecturer: Ms. Janine Wilcox, New York University Treasurer – Debt, Real Estate & Capital Programs

Readings:

- Ferguson, Chapter 6, From Empire to Chimerica
- Fundamentals of Municipal Bonds, Chapter 8, Understanding Interest Rates

Class 7 – October 25

Overview of Financial Instruments used in Municipal Finance

Topics:

- Discussion of readings
- Fixed rate
- Variable rate
- Derivatives
- Capital Appreciation Bonds
- Taxable Bonds

Readings:

- Fundamentals of Municipal Bonds, Chapter 9, Regulatory and Disclosure Requirements
- Ferguson, Chapter 7, The Descent of Money

Class 8 – November 1

Pricing Municipal Transactions

Topics:

- Discussion of readings
- Term Structure
- Process
- Structural Considerations
- Average life calculation

Homework #2 Distributed

Readings:

- Ferguson, Chapter 8, The Slight Depression
- Design Emergency, Chapters 1, 2, and 3
- Tufte, Chapter 1, Graphical Excellence

Class 9 – November 8

Credit Analysis

Topics:

- Discussion of readings
- Homework #2 review
- The Rating Agencies
- Rating Criteria
 - General Obligation Bonds
 - Revenue Bonds
- Rating Process
- Rating Significance
- Credit Enhancers

Homework #2 Due

Readings:

- Fundamentals of Municipal Bonds, Chapter 6: Investing in Bonds
- Ferguson, Chapter 9, From Euro to Ethereum
- Tufte, Chapter 2, Graphical Integrity

Class 10 – November 15

Fiscal stress, Default, and Municipal Bankruptcy

Topics:

- Discussion of readings
- An introduction to Chapter 9
- Detroit Bankruptcy
- Commonwealth of Puerto Rico

Paper Outline Due

Readings:

- Fundamentals of Municipal Bonds, Chapter 10, Financial Products
- Design Emergency, Chapter 5 through Housing
- Tufte, Chapter 3, Sources of Graphical Integrity and Sophistication, Chapter 4, Data-Ink and Graphical Redesign

Class 11 – November 22

Overview of Investors

Topics:

- Guest Lecturer: Mr. Tim Martin, New York City Office of the Comptroller
- Retail Investors
- Institutional Investors
- The secondary market in municipal securities
- Sample investor breakout: \$799,660, The City of New York General Obligation Bonds, Fiscal 2015 Series C and Series D

Readings:

- Design Emergency, Chapter 5 Health Care through Social Systems

Class 12 – November 29

Introduction to Municipal Bond Refunding

Topics:

- Discussion of readings
- Purpose
- Importance to Public Finance
- Redemption options
- Make whole redemptions

Readings:

- Design Emergency, Chapter 7
- Fundamentals of Municipal Bonds, Chapter 5, The Secondary Market
- Tufte, Chapter 6, Data-Ink Maximization and Graphical Design

Class 13 – December 6

International Public Finance: Looking Forward

Topics:

- Guest speaker: Mr. Marshall Lindsey , Sovereign Infrastructure Group
- Emerging Trends

Readings:

- Tufte, Chapter 7, Multifunctioning Graphical Elements, Chapter 8, Data Density and Small Multiples, Chapter 9, Aesthetics and Technique in Data Graphical Design, Epilogue: Designs for the Display of Information
- Design Emergency, Chapter 6

Class 14 – December 13

Review and Final Thoughts

Topics:

- Discussion of readings
- Discussion of Final
- Review of Course Goals
- Career Paths
- Reflections on the nature of finance and its impact on global prosperity
- Final Thoughts

Paper Due

Final Exam Distributed

Henry and Lucy Moses Center for Students with Disabilities at NYU

Academic accommodations are available for students with disabilities. Please visit the [Moses Center for Students with Disabilities \(CSD\) website](#) and click on the Reasonable Accommodations and How to Register tab or call or email CSD at (212-998-4980 or mosescsd@nyu.edu) for information. Students who are requesting academic accommodations are strongly advised to reach out to the Moses Center as early as possible in the semester for assistance.

NYU's Calendar Policy on Religious Holidays

[NYU's Calendar Policy on Religious Holidays](#) states that members of any religious group may, without penalty, absent themselves from classes when required in compliance with their religious obligations. Please notify me in advance of religious holidays that might coincide with exams to schedule mutually acceptable alternatives.