

**UNIVERSITY OF PENNSYLVANIA**  
**Fels Institute of Government**  
*Public Finance Investment Banking*  
*GAFL 515*

Course Outline - Spring 2008

This course examines the field of public finance in theory and in practice. The purpose of the course is to provide a detailed understanding of the many facets of and applications of finance in the public sector with a focus on public finance investment banking. The course will provide students with a broad-based and technical overview of public finance and municipal bonds as well as a thorough understanding of the business of public finance. The course will be rigorous and, at times, quantitative. The course is divided into six sections:

1. Overview of Public Finance and Municipal Bonds
2. Legal Framework Governing the Issuance of Tax-Exempt Bonds
3. Municipal Bond Analytics
4. Variable Rate Debt and Municipal Derivatives
5. Municipal Credit Analysis
6. Group Project Presentations

Readings

The core text will be Fundamentals of Municipal Bonds published by the Public Securities Association. This text will be supplemented by an additional book, Handbook for Municipal Bond Issuers by Joe Mysak, a bulkpack and other handouts including, among other things, rating agency reports and reference material, bond official statements, and numerous articles focused on current topics in public finance. "The Bond Buyer," a daily industry paper will also be used.

Requirements

The format of the course will center on group discussion and active class participation. Students will be required to prepare for each session and to actively participate. There will be assignments throughout the semester that are required to be handed in. In addition, there will be a group project, presentation of the group project to the class and a take home final exam.

### Section 1. Overview of Public Finance Investment Banking (three class periods)

This section will examine public finance theory, municipal bonds, tax law and the overall municipal market.

### Section 2. Legal Framework Governing the Issuance of Tax-Exempt Bonds (one class)

This session and readings will examine certain sections of the Internal Revenue Code that relate to municipal bonds. We will also analyze the concept of arbitrage and how it relates to the municipal market. The legal framework for the issuance of municipal bonds will also be reviewed. The role of bond counsel, the bond opinion and security for bondholders will all be developed.

### Section 3. Municipal Bond Analytics (three class periods)

The focus of this section will be on the fundamentals of bond mathematics. We will initially concentrate on theory, but the majority of the section will center on applying theory to real life situations. At the conclusion of this section students will not only understand present value in the context of public finance, but will also know how to run debt service schedules, structure a new money bond sizing and analyze current and advance refundings. Homework problems will be assigned. The class will utilize a software program, DBC Finance, for this section of the course. DBC Finance is the leading software program for municipal bond analytics.

### Section 4. Variable Rate Debt and Municipal Derivatives (three class periods)

Variable rate debt will be fully explained and analyzed including variable rate demand bonds and auction rate securities and the different forms of credit enhancement and liquidity. Managing variable interest rate risk will also be explored with a focus on the increasing use of swaps and other interest rate management techniques in the municipal market.

### Section 5. Municipal Credit Analysis (one class period)

Credit quality is integral to structuring public finance transactions. The role of rating agencies, bond issuers and investors will be analyzed. We will look at credit from the perspective of an issuer (borrower), investment banker and investor. Through case study we will also conduct credit analyses on at least two different types of borrowers (i.e. general obligation and revenue bond).

### Section 6. Group Project Presentations (two class periods)

Students will be given a choice of current topics in public finance and will then be asked to form groups of 3-5. Each group will be required to hand in a paper/presentation outline prior to mid-point in the semester to be reviewed and commented on by the instructor. Each group will be required to make a short, formal class presentation at the end of the semester. In addition, each group will be required to turn in a group paper no later than the last day of classes.