Public Finance  
Fall 2004  
Professor: Thomas A. Banker

Course Description:

This course will provide an overview of the many topics within public finance, with a major emphasis on state and local bonds. Other aspects to be discussed include the operation of the bond market, regulatory issues affecting public finance, the functions of the various participants in the public finance industry and the mathematics of public finance.

As a survey course, the goal of the semester is not to provide the student with the full range of skills necessary to personally perform all of these tasks, but rather to provide the student with the level of knowledge and the command of the lexicon necessary to understand the relationships among the many components and to communicate effectively with specialists in each field.

In addition to classroom lectures and use of the required texts, the course will also include outside reading assignments on related topics. Some of these readings will be distributed in class, plus each student will be required to read and report on current articles on some aspect of public finance.

Students shall be required to maintain a journal of relevant articles appearing in the popular and/or scholarly press during the semester. A minimum of six articles will be required. The journal shall include original copies of each article, with annotations as to its source and relevance. Each week, one student will be required to report on the article he/she included in the journal, which report will be used as a basis for class discussion. All journals will be required to be submitted for review as of the final day of class.

Students will also be required to research an actual public finance transaction, and to obtain the official documents related thereto. Each student will use the information learned in the class as a basis for commentary on the transaction selected.

It is expected that course grades will be based on a series of events, including class participation, the review of the journal, the research assignments, as well as mid-term and final examinations. The expectations and requirements for each graded event will be explained in further detail when assigned.

Required Texts:


The Financier; Theodore Drieser; Plume Press; (1988 Reprint)

Big Bets Gone Bad; Derivatives and Bankruptcy in Orange County; Phillipe Jorion and Robert Roper; Academic Press (1995)

There will also be some supplemental materials for the course that will be reproduced by the professor and provided to students for the cost of reproduction.
**Week 1: Introduction to Public Finance**

This class will introduce the students to the field of Public Finance. The lecture will review the foundations of government borrowing, such as the differences between public and private goods and the differences between capital and operating needs. The session will also examine the reasons why governments borrow. A brief history of the field will also be provided.

**Week 2: Characteristics of Public Debt**

This class will introduce the students to the lexicon of the public finance field, and will use that new glossary to explain the general factors that distinguish the various forms of public offerings. Among the concepts to be considered will be the differences between general obligation and revenue issues, debt duration, interest rate structures, principal repayment structures, calls and defeasance, bond forms, face and market values, credit enhancements, bond ratings, sales types, yields and costs.

**Week 3: How The Bond Market Works**

This class will provide a general explanation of how bonds are actually issued and traded. Both primary markets and secondary markets for both Federal debt and municipal debt will be examined.

**Week 4: Regulatory Issues**

Debt issuance is among the most closely regulated of government activities. This class will provide an overview of the matters that are subject to regulation, including tax exemption, disclosure and issuer and project authority. The role of key regulatory agencies, such as the IRS, the SEC and state finance boards will be discussed as well.

**Week 5: Public Finance Participants and Their Roles**

This week will focus on those who are responsible to assist in the issuance of public debt, as well as those responsible to buy and market public securities. This will include the roles of public treasurers, bond counsels, financial advisors, rating agencies, trustees and paying agents, the Deposit Trust Company, bond insurers, municipal research staffs, underwriters, bond traders, investment bankers, institutional and retail brokers and buyers. Descriptions of their duties, the contracts required for engagement and the fee structures will be explained.

**Week 6: Bond Documents**

This week will introduce the class to the major documents that are used in public finance. This will include official statements and other forms of disclosure, bond certificates, bond contracts and indentures, tax and other legal opinions, bond ratings and rating agency reports and closing documents.
Week 7: Federal Securities

This week will discuss the types of debt issued by the US Federal government and related agencies. This will include Treasury bills, Treasury notes, Treasury bonds, Treasury STRIPS, US Savings Bonds, and SLUGS. The session will also touch on the instruments issued by government sponsored agencies, such as those issued by Fannie Mae, and those issued for international financing, such as the activities of the World Bank and the IMF.

Week 8: Municipal Securities – Short Term Debt

This week will discuss the various types of short term debt issued by states and local governments, including tax anticipation notes, revenue anticipation notes, bond anticipation notes and variable rate demand notes. Both the nature of the debt obligation and the process used to issue the debt will be explained.

Week 9: Municipal Securities – General Obligation Bonds

This week will discuss the most traditional type of long term debt issued by states and local governments. Both the nature of the debt obligation and the process used to issue the debt will be explained.

Week 10: Municipal Securities – Revenue Bonds

This week will discuss the various types of revenue based long term debt issued by states and local governments, including that which is issued for special purposes such as water and wastewater systems, transportation projects, housing and development purposes, health care, education, solid waste, and public electric and gas utilities. The various types of public authorities and other specialty issuers, the nature of the debt obligations and the process used to issue the debt will be explained.

Week 11: Derivatives

This week will discuss the various types of specialty debt products which have been developed in recent years and which are issued by some states and local governments. The class will outline a variety of specialized products, such as variable rate demand bonds, interest rate swaps and caps, Floaters and inverse floaters, Indexed inverse floaters, forward purchase bonds and others. The various risks and rewards of the use of these products, the nature of the debt obligations and the process used to issue the debt will be explained.

Week 12: Bond Mathematics

This week will introduce the students to the methods of computation needed to understand debt calculations. Concepts to be discussed are those of face value, market value, nominal yield and effective yield, net interest cost and total interest cost, par, discount and premium pricing and principal and interest calculation for various repayment structures.