

Indiana University  
School of Public & Environmental Affairs

**SEMINAR IN PUBLIC CAPITAL AND DEBT THEORY**

Fall 2004, V667-11004  
PV 273, T & TH: 4:00 – 5:15pm

Dr. Craig L. Johnson  
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Office Hours: Thursday, 10-11:30am and Friday by appt.

**COURSE OVERVIEW**

This seminar is an advanced course on capital markets and debt management. The emphasis of the seminar is on using financial economic theories and financial management techniques to solve complex financing problems in the municipal securities market. Students will develop a thorough understanding of the municipal securities market, including the analysis of sophisticated credits & the development of innovative financing techniques. Students will also acquire the ability to analyze capital financing decisions and the "workings" of the municipal securities market with the use of computer spreadsheet software.

**REQUIRED READINGS**

The Bond Market Association, written by Judy Wesalo Temel. "The Fundamentals of Municipal Bonds" (5th Edition. John Wiley & Sons, 2001.) (This book is hereinafter referred to as BMA 2001.) Other readings will be placed on electronic reserve (ER) or on my web site (WS) [www.mypage.iu.edu/crljohns](http://www.mypage.iu.edu/crljohns).

**ASSIGNMENTS & GRADING**

You are expected to regularly make an informed and productive contribution to class discussions. Your participation should demonstrate a critical understanding of assigned readings. Your grade will be based on your performance on the following:

Assignment 1: Bond Price Volatility Exercise	20%
Assignment 2: Revenue Bond Covenant Analysis	30
Assignments 3 & 4: Credit Analysis of Tax-Supported State Bond Issue	45
Class Participation	<u>5</u>
TOTAL:	100%

Any late assignment will receive an automatic one-time deduction of 15 percent.

**Assignment 1:** The Bond Pricing assignment is a technical exercise that requires you to demonstrate the ability to analyze the interest rate risk of fixed income securities.

**Assignment 2:** Using official marketing and disclosure documents, you will be required to write a memorandum identifying and analyzing the risks and benefits of the bond covenants in an enterprise revenue bond issue. Your analysis will focus on the bond covenants that cover the legal requirements and economic demand analysis of the financing. Your bond issue must be approved by the instructor. Several papers will be selected for oral presentation on 12/7 and 12/9. If you accept the invitation to present your paper, your presentation will fulfill the requirements of Assignment 4.

**Assignments 3 & 4:** This is a two-part credit quality analysis project. The first part (assignment 3) requires you to write a credit analysis of a state tax-supported bond issue. You will be provided the official statement (prospectus) of a recent bond issue to use as the primary, but not sole, source of information. The report must be 15 pages or fewer, not including mandatory exhibits. The written part of the assignment is worth 80 percent of your score. The second part of the assignment (4) is a team oral presentation covering the credit quality of your state. This part is worth 20 percent.

### **TOPICS AND READING ASSIGNMENTS**

The following describes the subject matter and reading assignments covered in the seminar.

8/31 Introduction and Housekeeping

#### **The Municipal Securities Market**

9/2 Overview of the Municipal Market and the Basics of Municipal Securities  
BMA, chs. 1, 2 (pgs. 21-42) & 4 (pgs. 82-84).

9/7 Municipal Issuers, the Regulatory Structure and Disclosure Requirements  
BMA, chs. 3 (pgs. 49-62) & 9.

9/9 The Primary and Secondary Markets – 1: What is an efficient market?  
Gallinger and Poe, “Efficiency of Financial Markets,” (ER). BMA, ch. 5.

9/14-16 Bringing the Debt Issue to Market: Institutional Players and Information Flows  
BMA, chs. 3 (pgs. 62-72), 4 (pgs. 85-103), & 7 (pgs. 159-172).

#### **Fixed Income Mathematics and Interest Rates**

9/21 Investing in Bonds and Time Value of Money  
BMA, ch. 6; Fabozzi, chs. 2 & 3 (ER).

9/23-28 Bond Pricing and Yield Measures  
Fabozzi, chs. 4, 5, 6 & 8 (ER).

9/30 Bond Price Volatility  
Fabozzi, chs. 9, 11, & 13 (ER). Suggested reading: Fabozzi, chs. 14 & 15 (ER)  
**ASSIGNMENT 1: Bond Price Volatility. Assigned (A): 9/30; Due (D): 10/07.**

10/5 Term Structure of Interest Rates

BMA, ch. 8.

### **Debt Issuance & Management**

- 10/7 Structuring the Bond Issue  
BMW, chs. 3 (pgs. 72-81) & 2 (42-48).
- 10/12-14 Financial Engineering and Municipal Derivatives  
BMA, ch.10; D. Bradbury and F. C. Oh, “Issuers Risk Management Using  
Derivatives and Variable-Rate Debt,” (ER). C. L. Johnson and J. Mikesell, “The Orange  
County Debacle: Where Irresponsible Cash and Debt Management Practices Collide,”  
(ER).
- Analyzing the Quality and Structure of Municipal Debt Issues**
- 10/19-26 Analyzing Enterprise Revenue Debt: Legal Structure and Demand Analysis  
BMA, ch. 7 (pgs. 181-192). D. Amber, J. Burr, K. McManus, H. Mischel & D.  
Roswick, “Revenue Bond Credit Analysis” (ER). *Long Island Power Authority*, Fitch  
Ratings Corporate Finance, June 10, 2004. (ER)  
**ASSIGNMENT 2: Enterprise Revenue Bond Covenant Analysis. A: 10/19; D:  
11/4**
- 10/28-11/2 Financial Contracting, Financial Intermediation and State Revolving Funds  
C.L. Johnson, “Managing Financial Resources to Meet Environmental Infrastructure  
Needs: The Case of State Revolving Funds,” (ER).
- 11/4 Understanding Tax Increment Financing  
C.L. Johnson, “The Use of Debt in Tax Increment Financing,” (ER). J. Drew Klacik  
and S. Nunn, “A Primer on Tax Increment Financing.” (ER)
- 11/9-11/16 Analyzing Tax Supported Debt: The Framework and Indicator Variables  
BMA, ch. 7 (pgs. 172-181). M. Zandi and N.S. Pema, “Regional Economics: It’s  
Influence on Municipal Credit Risk.” (ER)  
Suggested Reading: S. Groves and M. Valente, “Evaluating Financial Condition,”  
(ER)  
**ASSIGNMENT 3: Written Credit Analysis of State Tax-Supported Debt Issue.  
A: 11/9; D: 12/2.**
- 11/18-12/2 Analyzing Tax Supported Debt: Case Study of the District of Columbia  
C. Johnson, and J. Mikesell, “On Municipal Financial Condition: An Analysis of the  
District of Columbia,” (ER).
- 12/7 Enterprise Revenue Bond Covenant Analysis Presentations
- 12/9 Enterprise Revenue Bond Covenant Analysis Presentations
- 12/14 **ASSIGNMENT 4: State Credit Analysis Team Presentations. 5:00-7:00pm.**