

**COLLEGE OF BUSINESS**
*Illinois State University***Department of Finance, Insurance & Law**
FIL 346 Fixed Income Analysis and Portfolio Management**COURSE SYLLABUS****College of Business Mission**

To be a highly respected college of business that develops professionals with the personal dedication, ethics and lifelong learning capabilities needed to succeed professionally and to serve society. We work as a diverse community promoting excellence in learning, teaching, scholarship, and service.

Academic Integrity

As a student enrolled in College of Business classes you are expected to maintain high standards of ethical conduct within the classroom and when completing assignments, projects, and/or exams. Cheating and other forms of academic dishonesty such as plagiarism will not be tolerated. You are expected to provide appropriate citations for non-original writing even if you paraphrase the original work. Using AI or browsing the web when taking quizzes or exams, working on quizzes or individual assignments together, or sharing information about exam questions is considered cheating in this course. Penalties for academic dishonesty may be severe.

Professional Standards

You should be familiar with and adhere to the [College of Business Standards of Professional Behavior and Ethical Conduct](#) (see p.7 of the linked document for students).

CLASSES MEET: MW: 12:35-1:50 in SFHB 022E (one of the labs in the COB atrium)
CREDIT HOURS: 3
PREREQUISITES: FIL 241 & FIL 242
INSTRUCTOR: Dr. Vladimir Kotomin, CFA
Office SFHB 309; tel. (309) 438-2448; email vkotomi@ilstu.edu

OFFICE HOURS: MW 11:30-12:30 and 1:50-2:20 in person on days classes are held;
by appointment (in person or via Zoom)

REQUIRED:

Your time: This is one of the most challenging finance electives. Plan to spend between 8 and 12 hours a week studying and performing course-related activities.

Text: *Bond Markets, Analysis and Strategies, 10e.*, by Fabozzi & Fabozzi, ISBN 9780262046275.
The text is available **for free** as an [e-book](#) through Milner Library.

Computer access: You must have access to a computer with internet access and Microsoft Office. We will also use the software Morningstar Direct installed on COB computers (you will have to be on campus to access it). Course materials, assessments, and assignments will be accessible through Canvas.

Excel: Required for assignments, allowed on exams.

Supplementary materials: Posted on Canvas under the Modules tab.

COURSE DESCRIPTION

FIL 346 provides an analysis of fixed-income markets and securities. Topics covered include bond mathematics, application of duration, an overview of key fixed income markets, as well as management and performance evaluation of bond portfolios.

FIL 346 has a significant fund management component. You will research fixed income mutual funds and exchange-traded funds and make investment recommendations for the Educational Fixed Income Fund (EFIF), a fund of funds with over \$1 million in assets under management. It is managed by the Department of Finance, Insurance & Law for the ISU Foundation. The fees collected by the department for managing the EFIF are used to fund one \$1,250 scholarship awarded every fall and spring to a student enrolled in the course.

COURSE OBJECTIVES

Upon successful completion of this course, you will be able to:

1. Compare and contrast various fixed income instruments, describe their distinctive characteristics.
2. Analyze the determinants of interest rates and sector spreads to develop and defend forecasts of interest rates.
3. Construct the theoretical spot rate curve for Treasury securities.
4. Calculate bond duration and apply it to measure bond interest rate risk and construct portfolio management strategies.
5. Evaluate the effect of embedded call and put options on bond pricing.
6. Describe and evaluate different fixed income portfolio management strategies.
7. Evaluate performance of fixed income securities and investment funds.
8. Make and defend investment recommendations for the Educational Fixed Income Fund.

INSTRUCTOR'S PHILOSOPHY

This is a rigorous elective course, and I assume you're taking it because you genuinely want to. To make the most of it, please be proactive in addressing any issues as they arise. If you find yourself struggling with the material, seek help as soon as you realize it—getting stuck occasionally is completely normal! Feel free to stop by during office hours, email me your questions, or request a virtual or in-person meeting. I typically respond to emails within a few hours (may take longer on weekends). If you know in advance that you'll miss a class, let me know, and make sure to catch up on the material you missed. If you need assistance with that, I'll be happy to help. You get the idea—communication is key.

My focus is on your learning. I'll clearly outline which topics you need to understand in depth, which ones require only a basic grasp, and which are less critical. To support your learning, I'll provide study guides for exams, work through examples in class, and offer frequent online quizzes and occasional in-class quizzes to help you stay on track.

We'll regularly discuss real-world situations relevant to the course, and I encourage you to stay informed about current events (e.g., by reading the Wall Street Journal). Feel free to bring up topics that interest you during these discussions—they often make the class more engaging and insightful.

I love when you ask questions. They not only allow me to help you and assess your progress but also help me refine how I teach the material. If you don't ask questions, I can't help you! I'll also ask questions to gauge your understanding and keep you engaged. You may not always remember what I say in class, but you're more likely to remember what you say. So, I strongly encourage active participation—answer

questions, ask your own, and contribute meaningful (and occasionally funny!) comments. Your involvement will make the class more interactive and enjoyable for everyone.

This course includes significant research and teamwork components. In teams of three or four, you'll research fixed-income mutual funds and exchange-traded funds for potential inclusion in the Educational Fixed Income Fund (EFIF) portfolio. Your commitment to teamwork will be essential to making this a successful and rewarding experience.

Student Access and Accommodation Services

If you need to arrange a reasonable accommodation for a documented disability and/or medical/mental health condition, contact Student Access and Accommodation Services at 308 Fell Hall, Office Phone (309) 438-5853, Video Phone (309) 319-7682, website StudentAccess.IllinoisState.edu

Mental Health

Life at college can get complicated. If you're feeling stressed, overwhelmed, lost, anxious, depressed or are struggling with personal issues, do not hesitate to call or visit Student Counseling Services (SCS). These services are free and completely confidential. SCS is located at 320 Student Services Building, 309-438-3655.

GRADED COURSE COMPONENTS

Exams include three midterms; there is no final exam in this course. Exams may include numerical problems and short written questions. No make-up exams will be allowed except for official university activities (must be accompanied by verification) or documented emergencies.

Quizzes and Assignments. Assignments are three Excel projects. Weekly Canvas quizzes will certainly include problem sets and may include multiple-choice and short written questions. Six in-class quizzes will be given, too; they may include problems and short written questions on recently covered material.

EFIF Investment Recommendations: Guidelines are on pp.5-7 of this syllabus.

Midterm Exams (3*120 pts.)	360 points	36%
Quizzes & Assignments	300 points	30%
[-Excel Assignments (3*30 pts.)	90 points	9%
-In-class Quizzes (6*20 pts.)	120 points	12%
-Canvas Quizzes (15*6 pts.)	90 points	9%]
EFIF Investment Recommendations	<u>340 points</u>	<u>34%</u>
<i>TOTAL</i>	<i>1000 points</i>	<i>100%</i>

The grading scale is a simple 90-80-70-60 scale.

TENTATIVE SCHEDULE*

DATE	TOPICS and ACTIVITIES*	CHAPTERS
Aug 17	Overview; Bond Pricing	1, 2
Aug 19	Bond Pricing	2
Aug 24	Measuring Yield	3
Aug 26	Measuring Yield	3
Aug 31	Bond Price Volatility	4
Sep 2	Bond Price Volatility	4
Sep 7	<i>Labor Day—no class!</i>	
Sep 9	Bond Price Volatility; Review	4
Sep 14	<i>Exam 1</i>	<i>1-4</i>
Sep 16	Factors Affecting Bond Yields and Term Structure	6
Sep 21	Factors Affecting Bond Yields and Term Structure	6
Sep 23	Bond Performance Measurement & Evaluation	28
Sep 28	Bond Performance Measurement & Evaluation; <i>EFIF Investment Policy Quiz (in class)</i> <i>Guest presentation: Mike Tracey, CFA, Country Financial</i>	28
Sep 30	Bond Portfolio Construction & Management Strategies	24, 25
Oct 5	Bond Portfolio Construction & Management Strategies	24, 25
Oct 7	<i>Exam 2</i>	<i>6, 24-25, 28, EFIF docs.</i>
Oct 12	Immunization and Cash Flow Matching	Instr. matl. & 27
Oct 14	Collective Investment Vehicles	17
<i>Oct 16, Fri</i>	<i>Current EFIF Portfolio Analysis due</i>	
Oct 19	Treasury and Agency Securities	7
Oct 21	Corporate Debt Instruments	8
<i>Oct 23, Fri</i>	<i>Last day to choose funds for analysis</i>	
Oct 26	Residential Mortgages	11
<i>Oct 27, Tue</i>	<i>Individual Fund Analysis due</i>	
Oct 28	Agency Pass-through MBS	12
Nov 2	Bonds with Embedded Options; <i>Guest presentation: Jon Strok, CFA, Country Financial</i>	19
Nov 4	<i>Exam 3</i>	<i>7, 8, 11, 12, 17, 19, 27</i>
Nov 9	Work on Investment Recommendations Report	
Nov 11	Work on Investment Recommendations Report (due 11:59 pm)	
Nov 16	Report Feedback (discussion with instructor)	
Nov 18	Work on Presentation	
Nov 23 & 25	<i>Thanksgiving break—no class!</i>	
Nov 30	Work on Presentation	
Dec 2	Presentations of EFIF Investment Recommendations	

* Subject to change on short notice. It is your responsibility to keep up with the changes.

Investment Research and Recommendations Guidelines

You will write a research report and make investment recommendations for the Educational Fixed-Income Fund (EFIF). I will randomly assign you to teams studying specific fixed income sectors. Each student will choose one mutual fund or exchange-traded fund for analysis. You may not choose a fund that is already in the EFIF portfolio or the same fund as another student. Failure to choose funds complying with the EFIF investment policy may result in a grade penalty.

The graded components of this project are:

1) Investment Policy Quiz (30 points) – individual grade

This online quiz will consist of ten multiple choice and true-false questions based on the following two EFIF documents: (i) Investment Policies, Objectives, and Guidelines and (ii) Investment Management Agreement. Both documents are posted on Canvas under Files → EFIF. You will have two attempts; the higher attempt score will count. You must score at least 70% on your best attempt to get credit: if your score is below 70%, I will reset it to zero.

2) Current Portfolio Analysis (30 points) – individual grade

You will use Excel to compute measures of risk, return, and performance for the current portfolio and its benchmark. Detailed instructions will be provided.

3) Individual Fund Analysis (30 points) – individual grade

I will provide the Fund Information Template. Supply all of the information that it asks for; you will retrieve most of this information from Morningstar Direct (15 points). Based on this information, provide a brief assessment of the fund's risks, strengths and weaknesses. Under what circumstances would your fund perform well? Poorly? (15 points)

4) Investment Recommendations Report (140 points) – combined ind'l & team grade

The report must be typed in size 12 Times New Roman font, double-spaced, with one-inch margins. Spelling, punctuation, or grammatical errors can result in substantial penalties (up to 20% of the total points), so please proofread carefully. Late submission of the report will result in a grade of zero for the report. No submission of the report will result in a grade of zero for the entire project. In the report, each team member takes primary responsibility for analyzing one mutual fund or ETF. While other teammates may help and the team should eventually make sure the report flows smoothly, the report must identify who is responsible for the analysis of each fund.

Structure of the report

- Title page:* Course title, team members' names with fund names and tickers, instructor's name, submission date. (0 pts., penalty up to 5 pts. if it does not adhere to this format).
- Assessment of economic conditions, forecast of interest rates, and implications for the EFIF* (4-6 pages) (60 points – same grade for all team members).

Suggested components:

- Analysis of general economic conditions, with the emphasis on forces that have influenced interest rates and spreads over the last 6-8 months. (3 pages maximum)
- Forecast of economic conditions and interest rates for the next 6-8 months. (2 pages maximum)
- Assessment of the EFIF current portfolio in light of your analyses and forecasts; implications and general recommendations for the EFIF (here the information you collected for the current portfolio analysis will be useful). (1 page maximum)

- iv. Specific recommendations (if any) for changes within the EFIF portfolio (e.g., selling \$50,000 of Fund ABC held by the EFIF and buying \$50,000 more of Fund XYZ also held by the EFIF). Defend your recommendations (i.e., explain why you make them). (1 page maximum)
- c. *Analysis of Investment Funds (60 points – individual grades):*
[In this part, each team member takes primary responsibility for analyzing one mutual fund or ETF.]
 - i. Data from the Fund Information Template you completed for Individual Fund Analysis (0 pts., penalty up to 15 pts. if you do not correct errors (if any) after receiving feedback on Template).
 - ii. Fund analysis (2.5 pages maximum). (50 points)
Base your analysis on the information from the Template, other information about the fund, assessment of its strengths and weaknesses, and your team's economic forecast. You may include (but are not limited to) the following in your analysis:
 - Summary of the fund's risks, starting with the most important one (in your opinion).
Warning: The discussion of risks in a fund prospectus may not be very useful: it often mentions an alphabet soup of risks the fund may possibly face (to protect against lawsuits).
 - Comparison to the funds currently held by the EFIF. If the fund is similar to one or more of the funds held by the EFIF, which one is superior and why?
 - Expectations of the fund's future performance based on your team's economic analysis.
 - iii. Investment recommendation (10 points). If you recommend a buy, specify how much the EFIF should invest in the fund and what fund(s) currently held by the EFIF should be sold. Whether you recommend buying the fund or not, defend your recommendation. It is critical that your recommendation is tied to the team's economic expectations. Occasionally, individual team members may dissent (disagree with the rest of the team's economic forecast). If you do, state it clearly and state your own economic forecast on which you are basing your recommendation.
- d. *Conclusion:* Summary of the economic outlook, restatement of recommendations, and reasons for making the recommendations. How would the EFIF portfolio's duration, credit risk, and income change if your recommendations are implemented? (1 page maximum) (20 pts – same grade for all team members)
- e. *Appendix (optional):* Any supplementary information you believe would be useful to readers (e.g., graphs, tables, etc.).
- f. *List of sources cited.*

General recommendations regarding the report

- a) The program Morningstar Direct and websites such as finance.yahoo.com or morningstar.com contain a wealth of information on investment funds. You may also find useful the fund's prospectus, semiannual report, and the statement of additional information (SAI); they may be found on the fund's company website or through Morningstar.
- b) Do not copy mindlessly from the fund prospectus or other documents – we don't need a generic discussion of risks contained in the prospectus. Such discussions are required by law and are next to useless for analysts. If you are quoting or paraphrasing other people's thoughts, acknowledge the sources.
- c) Keep in mind that most professional forecasters in finance have very large average forecast errors. Do not try to pinpoint your interest rate and spread forecasts. Instead, focus on key forces that may influence interest rates and spreads in the next 6-8 months, in your opinion. Focus on forecasting the direction more than the magnitude of interest rate and spread changes. Discuss

how you expect the funds you analyze to perform if your forecast is correct as well as if it is wrong.

d) If you wish, send me your report draft within a week of the due date; I will provide feedback.

5) Oral Presentations of Investment Recommendations (60 points) – combined ind'l & team grade

Team presentations will be made during the last week of classes and, if necessary, the time slot in the finals week that would otherwise be reserved for the final exam. A no-show on any of the presentation days will result not only in the grade of zero for the presentation but also in resetting your report grade to zero. Presentations should last 15-25 minutes. Every team member must participate in the presentation to get credit for it. Of the 60 points for the presentation, 20 points is allocated to the overall quality of the presentation (the same score for every team member) and another 40 points allocated to individual member performance (scores may differ among team members). The instructor, guests, and students in the audience will evaluate performance of the presenting teams and individuals (the evaluation score sheet is on the next-to-last page of this syllabus). The presentation score for each team and individual will be an average of the audience evaluations and the instructor's evaluation. After all presentations are made, the class will vote on the investment recommendations made by teams.

6) Peer Evaluations (50 points) – individual grade

Team projects require collaborative efforts. Similar to the business world, you must work together to achieve a collective goal, where the performance of the team depends upon each individual member's contribution.

To ensure an accurate evaluation for each member in your group, it is important for you to render honest, fair, and objective peer evaluations. Do not treat your power to evaluate one another lightly – use it to reward those students who were especially diligent and capable team members, and to penalize those individuals who contributed little to the group effort. You must turn in the filled in and signed peer evaluation form (reproduced on the last page of this document) by 5pm on the day after your team presentation. If you do not turn in peer evaluations by the end of the last week of classes, I may set your peer evaluation score to zero!

Key dates (subject to change)

- 1) Investment Policy Quiz – Mon, Sep 28 in class
- 2) Current EFIF Portfolio Analysis due – Fri, Oct 16 at 11:59 pm
- 3) Last day to choose funds for analysis – Fri, Oct 23 at 5:30 pm
- 4) Individual Fund Analysis due – Tue, Oct 27 at 11:59 pm
- 5) Investment Recommendations Report due – Wed, Nov 11 at 11:59 pm
- 6) Presentations of Investment Recommendations – Wed, Dec 2 (regular class time)
- 7) Peer evaluations due – 5 pm on the day after your team presentation

*FIL 346 Investment Recommendations**Presentation Evaluation Score Sheet*

Your name: _____

1. Individual evaluation

<i>CATEGORY</i>	<i>Max. Pts.</i>	<i>Name 1</i>	<i>Name 2</i>	<i>Name 3</i>	<i>Name 4</i>	<i>Name 5</i>
Knowledge of material	15					
Content and Organization (Thoroughness and Relevance, Organization of Ideas, Quality of Slides)	12					
Voice & Nonverbal (Volume & Pitch, Enunciation, Eye contact, Gestures)	8					
Professionalism (Enthusiasm & Confidence, Dress & appearance)	5					
Total	40					

2. Team Evaluation

Overall Quality/Organization of the Presentation (Internal consistency, Interaction within the Team, Interaction with the Audience): ____ out of **20** points.

Comments:

Date _____

Signature _____

FIL 346 Investment Recommendations Project***Peer Evaluation of Individual Performance***

Your name: _____

Instructions

Evaluate your teammates by assigning a numeric rating between 0 and 10 for each of the five categories where 0 indicates a poor rating and 10 indicates an excellent one. The sum of the five individual ratings is your evaluation of your teammate's total contribution to the group. Do *not* evaluate yourself.

CATEGORY	Team Member			
1. Attendance at team meetings (0-10)				
2. Willingness to work and work ethic (0-10)				
3. Commitment to Team Harmony (0-10)				
4. Contribution to Research and Decision Making (0-10)				
5. Contribution to Written Report (0-10)				
Total Individual Contribution (0-50)				

Comments:

Date _____

Signature _____