

**BA 4827 & BA 5827 – Fixed Income Analysis**

**Class Schedule:** Tuesday and Thursday at 10:45-12:00

**Class Room:** G 107

<b>Instructor:</b>	Dr. Z. Nuray Güner
<b>Office:</b>	FEAS Building B, H 113
<b>Phone:</b>	210 3075
<b>E-mail:</b>	<a href="mailto:nurayg@metu.edu.tr">nurayg@metu.edu.tr</a>
<b>Office Hours:</b>	Tuesday and Friday at 15:00-16:15
<b>Course Web Page:</b>	<a href="https://odtuclass.metu.edu.tr/">https://odtuclass.metu.edu.tr/</a> Students are a natural member of ODTUClass page of this course. Solutions to end of chapter problems, your grades, assignments and announcements will be posted there. In order to not to miss anything, please check your METU email accounts regularly.

**Course Description:**

Fixed income securities are an important part of portfolios held by individual and institutional investors around the world. In countries like Turkey, where the stock market is fairly new and highly risky, and treasury securities offer very high real returns, investment in fixed income securities become even more important. Fixed income securities have characteristics that are quite different from equity investments. Therefore, investments in these securities are governed by completely different principles. Furthermore, there are wide varieties of fixed income securities with quite complex cash flow structures in developed markets. Therefore, the objectives of this course are to:

- provide a review of different types of fixed income securities available in Turkish and international markets and their characteristics
- introduce interest rate models and their usage in valuation of complex cash flow streams of fixed income securities, and
- present professional fixed income portfolio management techniques and evaluation of portfolio performance.

**Course Student Learning Objectives: (CSLO)**

*Upon successful completion of this course, students should be able to:*

**Course Specific Skills:**

Students who complete this course should be able to:

1. identify different types of fixed income securities
2. price complex cash flows streams of fixed income securities
3. measure price volatility of fixed income securities
4. identify and measure different risks involved in fixed income investment
5. implement credit risk models
6. implement professional fixed income portfolio management
7. evaluate the performance of fixed income portfolio managers.

**Discipline Specific Skills:**

By the end of this course the students will be able to:

8. Become knowledgeable about fixed income securities and apply the basic concepts of finance to valuation of these securities;
9. Develop skills in financial analysis, planning, and decision-making;

**Personal and Key Skills:**

10. Develop problem solving skills
11. Develop writing and discussion skills

This course is going to make use of formal lectures, in-class discussions and problem solving.

**Required Reading:**

Required Textbook: Bond Markets, Analysis and Strategies by Frank J. Fabozzi, 8<sup>th</sup> edition, Pearson/Prentice Hall, 2013.

Highly Recommended: Reading Financial Magazines and financial pages of daily newspapers on a regular basis. Topics and articles found in current periodicals, as well as articles found on the internet, will be integrated into classroom discussion.

**Assessment and Grading:**

Form of Assessment	% Contribution	Size of the assessment	CSLOs covered by this assessment	Feedback Method
Interim Exams (2)	52	Essay-type examination	1 and 3	Written and oral (during office hours)
Final Exam	26	Essay-type examination	5, 6, and 7	Written and oral (during office hours)
Make-Up Exam (During the Final Exams Period)		Essay-type examination	1, 2, 3, 4, 5, 6 and 7	Written and oral (during office hours)
Attendance and Class Participation	10	Class participation during regular lectures	1, 2, 3, 4, 5, 6 and 7	Oral (during class hours)
Short Assignments and Homeworks	12	One or two problems from some chapters	1, 2, 3, 4, 5, 6 and 7	Oral (during class hours)

No “extra” work above the aforementioned will be accepted or credited.

**Important Note About Re-sit (Bütünleme) Exams:** Please note that re-sit exams are no longer given at METU.

**Incompletes:** A grade of incomplete will not be granted except for the most extreme circumstances and only after stringent verification and approval by the Department. A grade of incomplete will be granted only as a result of circumstances beyond the student's control. A grade of "I" is not given in lieu of an "FF".

**Course Policies:****Course Requirements:**

**Student Pictures:** Students are required to change their photos and upload a recent picture of themselves to the METU system before class on Monday **March 5, 2024**. These pictures will help me learn the names of students and associate names with faces.

**Exams:** There will be two interim exams throughout the semester. These exams will be administered in the evenings and will start at 18:30 unless otherwise stated. Please make a careful note of these exam and other due dates. These dates are fixed and non-negotiable. They will NOT be changed unless something *very important* and *unforeseeable* comes up during the term.

**Make-Up Exams: One comprehensive make-up exam will be given to those who missed an exam.** If you are going to miss an exam, please try to notify me in writing before the exam and obtain my permission for not taking the exam. Please make sure that you add all supporting documents to your letter. If you cannot notify me before the exam, then please try to do so as soon as possible after the

exam in writing. The date and time of this make-up exam will be announced later. It will be during the finals.

**Reading Assignments:** The following pages give the schedule for the reading assignments. The lectures will stress the most important and/or most difficult material. The students are required to read the chapters before they are covered in class.

**STUDENT DISABILITIES:** Any student, who, because of a disabling condition, may require special arrangements in order to meet course requirements, should contact the instructor as soon as possible. Students should present the appropriate documentation from the university's Disability Support Office (Engelsiz ODTÜ Birimi, ODTÜ Kütüphanesi, Solmaz İzdemir Salonu, Tel: 210.7196; [engelsiz@metu.edu.tr](mailto:engelsiz@metu.edu.tr)) verifying their disability, and outlining the special arrangements required. Please note that no accommodations will be provided to the disabled students prior to the completion of this approved University process.

**ACADEMIC DISHONESTY:** The Department of Business Administration has no tolerance for acts of academic dishonesty. Such acts damage the reputation of METU, the department and the BS/MBA degree and demean the honest efforts of the majority of the students. The minimum penalty for an act of academic dishonesty will be a zero for that assignment or exam.

**CHEATING:** All university, faculty/institute, and department principles on academic honesty will be strictly enforced. The usual consequence for academic dishonesty is failure of the course and referral of the case to the Dean of the Faculty or the Graduate School of Social Sciences for additional disciplinary action. Examinations are individual and are to be completed without outside assistance of any sort. Persons observed cheating during examinations will receive a failing grade in the course. Homework assignments are individual, unless otherwise specified by the instructor, and are to be completed without outside assistance of any sort, as well. Persons observed cheating in their homework assignments will receive a score of zero for the portion of the semester grade that is allocated to such assignments.

**PLAGIARISM:** The instructor assumes that students will do their own work. By placing their names on assignments (individual or team), students are affirming that the contents are their original work. Any previous work available from files or past students, as well as materials available on the internet may be used only as a suggestive model. Violation of this provision will be considered as unethical behavior, subject to disciplinary action. If you have any doubt about the use of a specific material, see the instructor ahead of time. Any material used from outside sources should be referenced appropriately. Persons observed to plagiarize while preparing assignments will be referred to the Dean of the Faculty or the Graduate School of Social Sciences for additional disciplinary action and also they will receive a score of zero for the portion of the semester grade that is allocated to such assignments.

### METU HONOR CODE

Every member of METU community adopts the following honor code as one of the core principles of academic life and strives to develop an academic environment where continuous adherence to this code is promoted.

"The members of the METU community are reliable, responsible and honorable people who embrace only the success and recognition they deserve, and act with integrity in their use, evaluation and presentation of facts, data and documents."

**CIVILITY IN THE CLASSROOM:** Students are expected to assist in maintaining an online classroom environment which is conducive to learning. In order to assure that all students have an opportunity to gain from time spent in class, students are expected to have their cameras on. Students are prohibited from making offensive remarks, reading newspapers, sleeping, or engaging in any other form of distraction. Inappropriate behavior in online classroom shall result, minimally, in a request to leave class.

Past observations showed that the METU classroom experience is improved when the following are true:

**Students are fully prepared for each class.** Much of the learning in this course takes place during classroom discussions. When students are not prepared, they cannot contribute to the learning process. This affects not only the individual but also the classmates who count on them.

**Students respect the views and opinions of their colleagues.** Disagreement and debate are encouraged; however, intolerance for the views of others is unacceptable.

**STUDENT EXCUSES:** Unless you inform me in advance, I will not excuse you from any of the grade requirements. At the same time, this does not mean that I will allow you to miss a test or an assignment with any excuse that you present to me. Please note that the excuse is acceptable for only the most extreme circumstances and only after stringent verification and approval by the Department.

**KNOW YOUR RIGHTS AND RESPONSIBILITIES!** <http://oidb.metu.edu.tr/en/academic-rules-and-regulations>

**NOTE THE IMPORTANT DATES ON THE ACADEMIC CALENDAR!**  
<http://oidb.metu.edu.tr/en/academic-calendar>

The instructor assumes that students who attend the next class have understood and agreed with all the requirements and rules of this course.

**Notes:**

- Usage of cell phones is strictly prohibited during class. Please be courteous to your classmates and me, and make sure that your phones are on silent mode before the class begins.
- You are encouraged to drop by my office during office hours for questions, concerns, or suggestions. Outside office hours, please make an appointment with me in advance, before or after the class, via phone or e-mail. For quick questions that you may have, note that e-mailing is a very effective means of communicating with me.

**Good luck to all of you and let's have a very enjoyable semester together!!**

**Don't be Trashy. Recycle.**

**Do not throw items away in the trash that should go into the recycling bin.  
Show a little class.**

**RECYCLING WORKS**

**Color Coded Tentative Class Schedule (subject to change)**Students Assignments and due dates are shown in **Blue**.Exam dates are shown in **Purple**.Additional Requirements are shown in **Hot Pink**.Extraordinary events are shown in **Red**.

Color Coded Tentative Course Schedule				
Month	Day	Topic	Reading/ Assignment	CSLO
February	20	Introduction	Chapter 1	1, 8 and 9
	22	Bond Price Volatility	Chapter 4	3, 8, 9, 10 and 11
	27	Bond Price Volatility (cont.'d)	Chapter 4	3, 8, 9, 10 and 11
	29	Factor Affecting Bond Yields and the Term Structure of Interest Rates	Chapter 5	3, 4, 8, 9, 10 and 11
March	2	<b>Extra Session – Saturday from 10:15-11:30</b> Factor Affecting Bond Yields and the Term Structure of Interest Rates (cont.'d)	Chapter 5	3, 4, 8, 9, 10 and 11
	5	<b>Student have to update their pictures in ODTUClass</b>		
	5	Residential Mortgage Loans	Chapter 10	1, 8, 9, 10 and 11
	7	Agency Mortgage Pass-Through Securities	Chapter 11	1, 8, 9, 10 and 11
	12	Agency Mortgage Pass-Through Securities (cont.'d) and Agency Collateralized Mortgage Obligations and Stripped Mortgage-Backed Securities	Chapter 11 Chapter 12	1, 8, 9, 10 and 11
	14	Agency Collateralized Mortgage Obligations and Stripped Mortgage-Backed Securities	Chapter 12	1, 8, 9, 10 and 11
	15	<b>First Exam at 18:30 (Chapters 1, 4, 5, 10 and 11)</b>		
	19	Nonagency Residential Mortgage-Backed Securities	Chapter 13	1, 8, 9, 10 and 11
	21	Commercial Mortgage Loans and Commercial Mortgage Backed Securities	Chapter 14	1, 8, 9, 10 and 11
	26	Commercial Mortgage Loans and Commercial Mortgage Backed Securities (cont.'d)	Chapter 14	1, 8, 9, 10 and 11
	28	Asset-Backed Securities	Chapter 15	1, 8, 9, 10 and 11
April	2	Asset-Backed Securities Analysis of Bonds with Embedded Options	Chapter 15 Chapter 17	1, 2, 8, 9, 10 and 11
	4	Analysis of Bonds with Embedded Options (cont'd.)	Chapter 17	2, 8, 9, 10 and 11
	9	<b>NO CLASS – Religious Holiday</b>		
	11	<b>NO CLASS – Religious Holiday</b>		
	16	Analysis of Residential Mortgage Backed Securities	Chapter 18	2, 8, 9, 10 and 11
	18	Analysis of Residential Mortgage Backed Securities (cont.'d)	Chapter 18	2, 8, 9, 10 and 11
	23	<b>NO CLASS – Official Holiday</b>		
	24	<b>Second Exam at 18:30 (Chapters 12, 13, 14, 15, 17)</b>		
	25	Analysis of Convertible Bonds	Chapter 19	2, 8, 9, 10 and 11

Color Coded Tentative Course Schedule				
Month	Day	Topic	Reading/ Assignment	CSLO
	30	Analysis of Convertible Bonds (cont'd.)	Chapter 19	2, 8, 9, 10 and 11
<b>May</b>	2	Corporate Bond Credit Analysis	Chapter 20	5, 8, 9, 10 and 11
	7	Corporate Bond Credit Analysis (cont.'d) Credit Risk Modeling	Chapter 20 Chapter 21	5, 8, 9, 10 and 11
	9	Credit Risk Modeling (cont.'d)	Chapter 21	5, 8, 9, 10 and 11
	14	Bond Portfolio Management Strategies	Chapter 22	6, 8, 9, 10 and 11
	16	Bond Portfolio Management Strategies (cont.'d) Bond Portfolio Construction	Chapter 22 Chapter 23	6, 8, 9, 10 and 11
	21	Bond Portfolio Construction (cont.'d)	Chapter 23	6, 8, 9, 10 and 11
	23	Liability Driven Strategies	Chapter 24	6, 8, 9, 10 and 11
	28	Bond Performance Measurement and Evaluation	Chapter 25	7, 8, 9, 10 and 11
	30	Question and Answer Session		
	<b>TBA</b>	<b>Final Exam (Chapters 18, 19, 20, 21, 22, 23, 24 and 25)</b>		
	<b>TBA</b>	<b>Comprehensive Make-Up Exam</b>		