# BIL 316: JAVA PROGRAMLAMA
# Spring 2012

**Instructor:** Yrd. Doc. Dr. Ahmet Sayar
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**Office hours:** By appointment or after the classes
**Class web page:** http://www.ahmetsayar.com/lecturenotes/

Students should normally contact me via email. Be sure to include the name of the course in the subject. Every effort will be made to respond to email within 24 hours except for weekends and holidays. Please use your university email account.

**Day & Time:** 1st Ed: Wednesday 11:00-13:00 (Amfi AB) 2nd Ed: Tuesday 17:00-19:40 (Amfi B)

**Aim:** This course is designed to teach you how to write computer programs, using the Java programming language.

**Course Description**: In this course, students will learn how to design and implement applets and applications. This course covers basic concepts and techniques for programming, including variables, control structures (decision and looping), text files, method writing, simple class design and usage, and arrays. It also introduces polymorphism, exceptions, recursions, and program organization using methods and passing variables.

**Textbooks:**

- Walter Savitch, Java: An Introduction to Problem Solving & Programming**,** 4th. Ed., Pearson Education, International Edition, 2005, ISBN:0-13-149202-0.

**Resources**:

- Deitel & Deitel, "Java How to Program", Prentice-Hall, 2006 (you can also use older editions)
- Arnold, Gosling & Holmes, "The Java Programming Language", Addison-Wesley Professional, 2005.

**Grading**: (Midterm and final exam grades will be weighted with lab grades - *%20*)

- Midterm = (exam*0.8+labs*0.2) : 40%
- Final = (**exam***0.8+labs*0.2) : 60%
    1. **exam** > 50
    2. 0.4*Midterm + 0.6*Final > 50
- **If (1 and 2) == TRUE YOU PASS**

**Course Learning Objectives/Outcomes:**

1. Creation of classes and small programs in Java.
2. Understanding and using libraries and API.
3. Designing and implementing medium to big size applications in Object Oriented by using Java
4. Designing and implementing Object Oriented applications with UML
5. Making use of various object-oriented features, including inheritance, abstraction, software reuse and genericity.
6. Applications of Object Oriented techniques to model real world.
7. Experience with working in a team.

**Class Schedule:**

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|---|---|
| 1.week: Introduction to the course and java | 9.week: Inheritance |
| 2.week: Primitive Types, Strings, and Console I/O | 10.week: Exception Handling |
| 3.week: Flow of Control | 11.week: Streams and File I/O |
| 4.week: Defining Classes and Methods | 12.week: Dynamic Data Structures and Generics |
| 5.week: More About Objects and Methods | 13.week: Recursion |
| 6.week: Arrays, linked lists. | 14. week: Application of some search algorithms in java – binary search, merge search. |
| 7.week: Preparation for the exam | 15.week: Applications of some data structures in java |
| 8.week: Midterm exam | 16.week: Preparation for the exam |

**Academic Dishonesty:**

Cheating will not be tolerated and may result in serious sanctions, including immediate failure in the course. Serious incidents of academic dishonesty will also for brought to the attention of the university and may result in expulsion. All work in this class is meant to be an individual effort by the person receiving the grade. Any variation from this is considered cheating and all parties involved (giving or receiving) will be sanctioned.