

# BIL 112E - Intr. to Prog. Language (Fortran)

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## **DAYS and HOURS:**

Please visit [http://www.sis.itu.edu.tr/tr/ders\\_programlari/LSprogramlar/prg.php?fb=BIL](http://www.sis.itu.edu.tr/tr/ders_programlari/LSprogramlar/prg.php?fb=BIL)

## **OFFICE HOUR:**

Please send an e-mail to arrange a personal visit. Feel free to visit my office for quick questions.

## **TOPICS:**

1. Flowcharts and algorithms
2. Data types, variables, mathematical operations, basic input/output
3. Decision making, logical expressions
4. Loops
5. Modules, subroutines, functions
6. Array operations: vectors and matrices
7. File input/output
8. Basic programming exercises
9. Exercises with modules
10. Basic numerical methods

## **GRADING and NOTES:**

Quiz Average	<b>20%</b>
Homework Average	<b>10%</b>
Midterm Exam	<b>30%</b>
Final Exam	<b>40%</b>

## **QUIZZES:**

The course will be exercise-based. Therefore your attendance will be regarded as your quiz grade. The attendance will be taken at the beginning of the first hour.

## **HOMEWORK ASSIGNMENTS:**

Homework assignments will be given via NINOVA. **Belated/e-mailed assignments will not be accepted.** You must upload your homework to NINOVA before the deadline. All assignments **showing an effort for the solution** will be **fully** graded.

## **MIDTERM EXAM:**

There will be one midterm exam.

## **REFERENCES:**

- *Programming in F*, T.M.R. Ellis, I.R. Philips, Addison-Wesley (1998)
- *Modern Fortran Explained*, M. Metcalf, J. Reid, M. Cohen, Oxford University Press (2011)
- *Numerical Analysis*, R.L. Burden, J.D. Faires, Brook/Cole Publishing Co. (1997)
- *Computational Physics*, R.H. Landau, M.J.P. Mejia, John Wiley & Sons, Inc. (1997)

## **OTHER:**

- The students are **required** to check the **NINOVA** system on a daily basis. All the announcements made via NINOVA will be considered as read and understood by the students.