Course Information

COURSE INFORMATION

Course Title	Code	Semester	L+U Hour	Credits	ECTS
Programming with Pascal in Physics	FZK214	4. Semester	2 + 2	3.0	7.0

Prerequisites	None

Language of Instruction	Turkish
Course Level	Bacheclor's Degree (First Cycle)
Course Type	Elective
Mode of delivery	Face to face
Course Coordinator	Prof. Dr. Caner ÇİÇEK
Instructors	
Assistants	
Course Objectives	This course has been planned to be able to quote the given problems to Pascal programming language by using algorithm and flow charts and to improve the ability to solve the given problems.
Course Content	İntroduction to algorithms,Problem-solving by using flowcharts,Overview of Programming Languages,General structure of Pascal language and basic concepts,Data Types,Operators,Comparison commands,Loop commands,İnfinite loop and nested loop concepts,arrays,functions,File operations,Application of physics at Pascal language,Application of physics at Pascal language
Course Learning Outcomes	1) Create algorithm and flow diagram for the solution of a faced problem 2) Analyze some problem by using Pascal programming language 3) Generate a solution by using Pascal programming language 4) Model and analyze of the physics problems in Pascal language 5) Develope Pascal language

WEEKLY COURSE CONTENT

Week	Topics	Teaching and Learning Methods and Techniques	Study Materials
1. Week	İntroduction to algorithms	Lectures, assignment , discussion, exercise, practice	
2. Week	Problem-solving by using flowcharts	Lectures, assignment , discussion, exercise, practice	

Quick Access

Physics
- Qualification Awarded
- Level of Qualification
- Qualification Requirements and Regulations
- Specific Admission Requirements
- Recognition of Prior Learning
- Profile of the Program
- Program Key Learning Outcomes
- Occupational Profile of Graduates
- Access to Further Studies
- Course Structure & Credits
- Exam Regulations & Assessment & Grading
- Graduation Requirements
- Mode of Study
- Programme Director(or Equivalent)
- Evaluation Questionnaire
- TYYÇ

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- Course Information
- Weekly Course Content
- Resources
- Course Category
- CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES
- ECTS credits and course workload

3. Week	Overview of Programming Languages	Lectures, assignment , discussion, exercise, practice	
4. Week	General structure of Pascal language and basic concepts	Lectures, assignment , discussion, exercise, practice	
5. Week	Data Types	Lectures, assignment , discussion, exercise, practice	
6. Week	Operators	Lectures, assignment , discussion, exercise, practice	
7. Week	Comparison commands	Lectures, assignment , discussion, exercise, practice	
8. Week	Loop commands	Lectures, assignment , discussion, exercise, practice	
9. Week	İnfinite loop and nested loop concepts	Lectures, assignment , discussion, exercise, practice	
10. Week	Mid-term exam	Written, oral exam	
11. Week	Arrays	Lectures, assignment , discussion, exercise, practice	
12. Week	Functions	Lectures, assignment , discussion, exercise, practice	
13. Week	Fle operations	Lectures,assignment , discussion, exercise, practice	
14. Week	Application of physics at Pascal language I	Lectures, assignment , discussion, exercise, practice	
15. Week	Application of physics at Pascal language II	Lectures, discussion, exercise	
16. Week	Final exam	Written, oral exam	

RESOURCES

Recommended Sources
Pascal Programming Language , 3. Press , Seçkin Press, Dr. Fahri Vatansever, 2009
Pascal Programming Fundamentals, Allied Publishers Limited, 8th Reprint, P.S. Grover, 2001

ASSESSMENT

Measurement and Evaluation Methods and Techniques
Midterm exam (%40), Final exam (%60)

COURSE CATEGORY

Course Category	Percentage
Core Courses	% 100

CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES

Programme Outcomes	Contribution Level	DK1	DK2	DK3	DK4	DK5
PY1	4	4	4	4	4	0
PY2	4	4	4	4	4	0
PY3	5	5	5	5	5	0
PY4	3	3	3	3	3	0
PY5	5	5	5	5	5	0
PY6	4	4	4	4	4	0
PY7	3	3	3	3	3	0
PY8	4	4	4	4	4	0
PY9	4	4	4	4	4	0
PY10	4	4	4	4	4	0
PY11	4	4	4	4	4	0
PY12	5	5	5	5	5	0
PY13	4	4	4	4	4	0
PY14	4	4	4	4	4	0
PY15	5	5	5	5	5	0

*DK = Course's Contrubution.

	0	1	2	3	4	5
Level of contribution	None	Very Low	Low	Fair	High	Very High

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ECTS CREDITS AND COURSE WORKLOAD

Event	Quantity	Duration (Hour)	Total Workload (Hour)
Class Hours (14 weeks)	14	4	56
Presentation/Seminar	4	1	4
Final Exam Preparation	1	14	14
Mid Term Exam Preparation	1	10	10
Assignment 1	14	4	56
Assignment 2	2	12	24
Preliminary Study	14	1	14
Final Exam	1	2	2
Mid Term Exam 1	1	2	2
		Total Workload	182
		Total Workload / 25.5 (s)	7.14
		ECTS Credit of the Course	7