

Course Syllabus IE 246.A Programming for Operations Research Fall 2020-21

INSTRUCTOR		
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Phone Number	0 216 564 9473	
Office Number	EF217	
Office Hours	Friday 16:00-17:00 (Zoom Link will be automatically emailed to you when you schedule your spot on https://calendly.com/erhun-kundakcioglu/10min)	
Research/Teaching Assistants	TBD	

	COURSE ORGANIZATION
Course Delivery Methods	Lectures and recitations will be delivered as a combination of online synchronous and online asynchronous.
Interaction Methods	LMS will be used for interaction, communication, course contents, and student submissions.
Technology Used by the Instructor	Technological platforms to be employed are: Zoom for online synchronous classes Loom for online asynchronous classes LMS for content delivery and student quiz/exam submissions
Technology Requirements for Students	Each student needs a laptop or desktop computer with a built-in or stand-alone camera and a microphone, and internet access that would not cause any disruptions in participating at the course and assessments.

	COURSE MATERIALS			
Required Books	Required Books Herbert Schildt, Java: A Beginner's Guide, 6th Ed., Oracle Press, 2014.			
Recommended Books	Paul Deitel and Harvey Deitel, Java: How to Program, 9th Ed., Deitel, 2012.			
	Kathy Sierra and Bert Bates, Head First Java, 2nd Ed. O'Reilly, 2005.			
Other Materials	Online course at https://missing.csail.mit.edu/			
	T. Cormen, C. Leiserson, R. Rivest, C. Stein, Introduction to Algorithms, 3rd Ed., The MIT Press, 2009.			
Accessing Course Materials	-			

	WEEKLY SUBJECTS (TENTATIVE)				
Week	Date	Subject			
1	05-09.10.2020	Basics: OS selection, text editor vs. IDE, commercial/open source, low/high level of coding, compiling, ssh, screen commands			
2	12-16.10.2020	Fundamentals of Programming (pseudocodes, loops, arguments, etc.)			
3	19-23.10.2020	Fundamentals of Programming (pseudocodes, loops, arguments, etc.)			
4	26-30.10.2020	Object-oriented programming			
5	02-06.11.2020	Object-oriented programming			
6	09-13.11.2020	Object-oriented programming			
7	16-20.11.2020	Alternative packages to solve optimization problems			
8	23-27.11.2020 (Withdrawal Week)	Alternative packages to solve optimization problems			
9	30.11-04.12.2020	Classes of optimization problems and NP-hardness			

	10	07-11.12.2020	Challenging combinatorial problems
Ī	11	14-18.12.2020	Challenging combinatorial problems
Ī	12	21-25.12.2020	Challenging combinatorial problems
Ī	13	28.12.2020-01.01.2021	Random data generation
Ī	14	04-08.01.2021	Monte-carlo simulation

ASSESSMENT METHODS, WEIGHTS AND RULES					
Туре	Weight	Assessment Method	Implementation Rule	Makeup Rule	
Final Exam	40%	Online without proctoring	All subjects of the course is covered	BÜT exam will serve as the makeup for the final exam	
Quiz	60%	Online without proctoring	Quizzes will be conducted every week	No makeup will be given for quizzes	
Total	100%		-		

ASSESSMENT(S) BEFORE THE WITHDRAWAL DEADLINE				
Type of Assessment(s)	Weight(s)	Date by When the Score of the		
		Assessment is to be Announced		
Three quizzes	18%	23.11.2020		

DETERMINING LETTER GRADE

10 quizzes (6 points each) and the Final Exam will be counted for the final letter grade.

Letter grade is determined using the table below:

Total points	100-95	94-90	89-85	84-80	79-75	74-70	69-65	64-60	59-55	54-50
Letter Grade	Α	A-	B+	В	B-	C+	С	C-	D+	D

This catalog is not negotiable and will not be adjusted whatsoever.

- There will be a minimum of 40% (24 out of 60) in the quizzes in order to take the final exam. This is nonnegotiable and will not be adjusted whatsoever.
- There will be a minimum required total score of 50 to pass the course. This is nonnegotiable and will not be adjusted whatsoever.

EXPECTED STUDENT SEMESTER WORKLOAD		
Activities Carried Out in The Presence of An Instructor	Total Hours in Semester	
Lecture (Including Discussion Sessions)	42	
Recitation/Practice	28	
Activities Carried Out by The Learner Him/Herself	Total Hours in Semester	
Pre-class Learning of Course Material	40	
Review of Course Material for Exam Preparation	60	
Overall Total Hours in Semester	170	

ONLINE COURSE ADMINISTRATION Students who register to this course are assumed to have accepted the following rules and

regulations. Online Lectures will take place during the days/hours announced at SIS. **Synchronous** Instructors may record the lectures in order to later make them available to students asynchronously. Instructors would normally be recording their own video/audio during the lectures, but students' audiovisual data may also end up being recorded especially during question & answer periods. Students who do not wish their audiovisual data to be recorded may turn off their video/audio. Students who leave their video/audio on during the lectures are assumed to have allowed recording/sharing of their audiovisual data. At times during the lectures, students' active involvement in certain activities may be requested by the instructors which would require students to turn on their video/audio during those times. If a student

	 declines to turn on his/her video/audio when requested, then he/she is assumed not to have participated at these activities. The instructors may request students to turn on their video/audio at certain instances during the lectures in order to take attendance. If a student declines to turn on his/her video/audio when requested, then he/she is assumed not to have attended the lecture.
Online Asynchronous	 Prerecorded lecture videos will be made available to students before the scheduled lecture hour. At least a one hour of synchronous session will be conducted during the scheduled hours of the course in order to provide a means of weekly interaction with the students. Although these sessions will not be recorded, the instructors may request students to turn on their video/audio during these sessions for interaction. Attendance to these sessions is strongly encouraged but is not mandatory.

ONLINE EXAM ADMINISTRATION			
Students who register to this course are assumed to have accepted the following rules and regulations.			
Online without Proctoring	 Students must comply with the announced duration of the exam. Beginning the exam/quiz early or finishing late may result in the cancellation of the student's exam. A detailed procedure that the students must follow during the exam/quiz will be provided by the instructor prior to the exam/quiz. 		

	OTHER RULES AND INFORMATION
Health and Safety	Announced safety procedures must be strictly followed during any laboratory and similar work. Please refer to the safety guidelines posted in the laboratories. In case of emergencies, call 9911 (216 564 9911).
Accessibility	Reasonable accommodations will be provided for students with verifiable disabilities. Please inform your instructor if you need any assistance.
Academic and Technical Support	Students can get help from the Writing Center, Solution Center and IT in case they need academic and/or technical support with their classes.
Objections to Examination Results	Objections for exam/quiz grading will be considered only within one week from the time grades are announced. Only written requests that indicate what grading aspect student disagrees will be considered. Requests such as "can you check my entire exam/quiz or question again" will be disregarded.
	End of semester emails/conversations objecting your letter grade or grading scheme will, unfortunately, be disregarded . We know that it is crucial for you to pass this course, and it is your responsibility to work and show how important it is for you <u>during the semester</u> .
	Students who object to their exam results and cannot resolve their objections with the instructor of the course, may file a written petition for a review of their exam papers at their Dean's/Director's Office within five business days from the announcement their exam results.
Academic Integrity and Honor Code	Students are assumed to abide by scholastic honesty and uphold the Honor Code. Scholastic dishonesty includes, but is not limited to cheating, attempting to cheat, plagiarizing, fabricating information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting the work of another person, or tampering with the academic work of other students. Any form of scholastic dishonesty is a serious academic violation and will result in a disciplinary action and also may result in student getting a 0 grade in the related assessment.
Unauthorized Recording/Sharing of Lectures	Recording/sharing of synchronous/asynchronous lectures or copying of lecture recordings are prohibited without the permission of the instructor. Actions such as unauthorized recording, giving the recording to someone else, taking it, using it or sharing it in physical or virtual media are prohibited and/or are offenses according to the relevant legislation. In such cases, legal procedures will be initiated in addition to starting disciplinary actions against those involved.
Flexibility	Circumstances may arise during the course that prevents the instructor from fulfilling each and every component of this syllabus; therefore, the syllabus is subject to change. Students will be notified prior to any changes.