

Computational Fluid Dynamics – I (97-98-I)				Class: 311	Time: Sun-Tue 10:30-11:45	
Teacher: Prof. V. Esfahanian				TA: A. Bahrami & M. Fazli		
#	Date	Topics	Reading Assignments	Quiz	Homework	Projects
week 1	1397/7/1	Introduction	Chapter 1		HW #1	
	1397/7/3	PDE	2.1, 2.2, 2.3, 2.4, 2.5			
week 2	1397/7/8	PDE	2.6, 2.7, 2.8, 2.9, 2.10		HW #2	
	1397/7/10	Finite Difference Calculus	3.1, 3.2, 3.3	Quiz #1		
week 3	1397/7/15	Finite Difference Calculus	3.4, 3.5, 3.6, 3.7		HW #3	
	1397/7/17	Finite Difference Calculus	3.8, 3.9, 3.10	Quiz #2		
week 4	1397/7/22	Finite Difference Calculus	3.11, 3.12, 3.13, 3.14		HW #4	
	1397/7/24	FDM for Parabolic PDE's	4.1, 4.2, 4.3, 4.4, 4.5	Quiz #3		
week 5	1397/7/29	FDM for Parabolic PDE's	4.6, 4.7, 4.8, 4.9, 4.10		HW #5	
	1397/8/1	Stability of FDM	5.1, 5.2	Quiz #4	HW #6	
week 6	1397/8/6	Stability of FDM	5.3, 5.4, 5.5	Quiz #5 Takehome	HW #7	
	1397/8/8	Holiday				
week 7	1397/8/13	Midterm #I		Chapters: 1,2,3,4		
	1397/8/15	FDM for Elliptic PDE's	6.1, 6.2, 6.3	Quiz #6		

#	Date	Topics	Reading Assignments	Quiz	Homework	Projects	
week 8	1397/8/20	FDM for Elliptic PDE's	6.4, 6.5, 6.6, 6.7		HW #8		
	1397/8/22	FDM for Elliptic PDE's	6.8, 6.9, 6.10			PROJECT #1	
week 9	1397/8/27	Finite Volume Method	7.1, 7.2, 7.3, 7.4				
	1397/8/29	Finite Volume Method	7.5, 7.6, 7.7, 7.8	Quiz#7 Quiz #8 Takehome	HW #9		
week 10	1397/9/4	Holiday					
	1397/9/6	Finite Volume Method	7.9, 7.10, 7.11, 7.12				
week 11	1397/9/11	Finite Volume Method	7.13, 7.14, 7.15				
	1397/9/13	Finite Volume Method	7.16, 7.17			PROJECT #2	
week 12	1397/9/18	Hyperbolic Equations	8.1, 8.2				
	1397/9/20	Hyperbolic Equations	8.3, 8.4, 8.5	Quiz #9			
week 13	1397/9/25	Hyperbolic Equations	8.6, 8.7		HW #10		
	1397/9/27	Midterm #II Chapters: 5,6,7					
week 14	1397/10/2	Numerical Solution of Hyperbolic EQ.	9.1, 9.2, 9.3, 9.4				
	1397/10/4	Numerical Solution of Hyperbolic EQ.	9.5, 9.6, 9.7, 9.8, 9.9	Quiz #10			
week 15	1397/10/9	Numerical Solution of Hyperbolic EQ.	9.10, 9.11, 9.12		HW #11		
	1397/10/11	Numerical Solution of Hyperbolic EQ.	9.13, 9.14, 9.15, 9.16	Quiz #11			
week 16	1397/10/16	Numerical Solution of Hyperbolic EQ.	9.17, 9.18, 9.19, 9.20				
	1397/10/18	Problem Solving					
Final Exam Comprehensive							