

Class title	Computer II (전자계산2)	Credit	2
Class room	SCI232 (과232)	Time	Tue7,8 (화7,8)
Lecturer	In-Sun Song (송인선)	Affiliation	Dept. Atmos. Sci. (대기과학과)
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Email	songi@yonsei.ac.kr	Visit hour	Tue9 (화9)
Level	Undergraduate students in science or engineering majors		
Objectives	Understanding recent version of Fortran for scientific and engineering computations, C-interoperability, parallelism, and self-descriptive data format		
Pre-requisites	Basic-level knowledge of operating system, computing system and hardware can help (e.g., Windows operating system, cpu, thread, stack, heap).		
Format	Mixture of online and offline (Online or offline weeks). Offline lectures will be announced in advance when they are expected to be possible.		
Evaluation	Relative grading (Mid-term: 30%, Final-term: 30%, Assignment: 40%)		
References	R1: Modern Fortran explained: Incorporating Fortran 2018, 5th edition, Oxford University Press, by M. Metchalf, J. Reid, and M. Cohen R2: NetCDF4 Fortran documentation: https://www.unidata.ucar.edu/software/netcdf/docs-fortran		
Lecturer info	In-Sun Song Visit https://undividedlife.github.io for details		
Tools	GNU fortran (gfortran), GNU C (gcc), GNU debugger (gdb) on Windows system		
Language	Korean		

Week	Period	Contents	Materials	Others
1	2021-03-02 2021-03-07	Background, comparison with the other compiled and script languages, GNU compilers and debugger, Fortran source form, data type	R1-Ch.1 ^a , R1-Ch.2	(3.2.)개강 (3.5.–3.9.) 수강신청 확인 및 변경
2	2021-03-08 2021-03-14	Floating point arithmetic, exception handling	R1-Ch.18	(3.5.–3.9.) 수강신청 확인 및 변경
3	2021-03-15 2021-03-21	Assignments: Scalar, character, array	R1-Ch.3, R1-Ch.8	
4	2021-03-22 2021-03-28	Assignments: Derived data type, pointer	R1-Ch.3, R1-Ch.8	
5	2021-03-29 2021-04-04	Control constructs: If, case, where, continue, exit	R1-Ch.4	
6	2021-04-05 2021-04-11	Control constructs: Do, while	R1-Ch.4	(4.5.–4.7.) 수강철회
7	2021-04-12 2021-04-18	File: (Un)formatted, namelist, Fortran binary, system independent binary with meta data	R1-Ch.10, R2	
8	2021-04-19 2021-04-25	Mid-term exam		(4.19.–4.23.) 중간시험
9	2021-04-26 2021-05-02	Program units: Main, subroutines, functions	R1-Ch.5	
10	2021-05-03 2021-05-09	Module, module procedure, scoping rules	R1-Ch.5	(5.5.) 어린이날
11	2021-05-10 2021-05-16	Explicit interface, generic procedure, external libraries	R1-Ch.5, R2	
12	2021-05-17 2021-05-23	Array features, memory management	R1-Ch.6, R1-Ch.7	(5.19.) 부처님 오신 날
13	2021-05-24 2021-05-30	Intrinsic procedures	R1-Ch.9	
14	2021-05-31 2021-06-06	C-Interoperability, calling C libraries	R1-Ch.19	(6.6.) 현충일
15	2021-06-07 2021-06-13	Coarray, parallelism, thread safety	R1-Ch.17	(6.7.–6.11.) 자율학습 및 보충학습 기간
16	2021-06-14 2021-06-20	Final exam		(6.14.–6.18.) 기말시험

^aChapter 1 in the reference 1 (R1)