

COMP 3050 Computer Architecture

Fall 2023 Class Schedule

- Sep**
7 **R** ch 2, Integer Representation, Floating Point Representation
http://www.cs.uml.edu/~bill/cs305/First_class_slides.pdf
http://www.cs.uml.edu/~bill/cs305/First_class_examples.pdf
review on-line floating point slides at
http://www.cs.uml.edu/~bill/cs305/Floating_Point.pdf ,read ch2.4 to end
ch 2, **Assign #1 handed out , read Assign #1**
http://www.cs.uml.edu/~bill/cs305/Assignment_1.pdf
- 12 **T** on-line floating point slides, review Assign #1, complete ch 2, read Mic1
detailed description
http://www.cs.uml.edu/~bill/cs305/Mic1_details.pdf
- 14 **R** Mic1 Machine Architecture, read Mic1 description and examples
http://www.cs.uml.edu/~bill/cs305/Mic1_details.pdf
http://www.cs.uml.edu/~bill/cs305/Mic1_Help_basics.pdf
Assign #2 posted, read Assign #2
- 19 **T** Mic1 Assembly Level Programming, review Assign #2, Mic1 Microcode
Instruction Architecture and examples
http://www.cs.uml.edu/~bill/cs305/Mic1_help_architecture.pdf
http://www.cs.uml.edu/~bill/cs305/Mic1_Help_basics.pdf
- 21 **R** **Assign #1 due**, Mic1 Microcode Instruction Implementation, Using the
mcc Tool
http://www.cs.uml.edu/~bill/cs305/adder_example.pdf
http://www.cs.uml.edu/~bill/cs305/Microcode_parsing.pdf
- 26 **T** **Assign #2 due, Assign #3 posted, read Assign #3,**
<http://www.cs.uml.edu/~bill/cs305/rfib.c>
- 28 **R** Mic1 Adding New Microcode Instructions, examples, review Assign #3
http://www.cs.uml.edu/~bill/cs305/promfile_simple.mc
- Oct**
3 **T** Mic1 Implementing new machine level instructions and updating
assembler support
http://www.cs.uml.edu/~bill/cs305/promfile_nand_rshift.pdf
- 5** **R** **Assign #3 due**, Mic1 Integrating all the pieces, **Assign #4 posted, read**
Assign #4, assignment #1 submission cutoff at midnight (11:59:59)
tonight.
http://www.cs.uml.edu/~bill/cs305/Assignment_4_help_dir/mic1symasm_nand_rshift.c
http://www.cs.uml.edu/~bill/cs305/Assignment_4_help_dir/mic1symasm_nand_rshift.ll
http://www.cs.uml.edu/~bill/cs305/Assignment_4_help_dir/Makefile_nand_rshift

- 10 T Mic1 Assign #4 review, Review for exam #1, ch 2 and Mic1 material
- 12 R Review for exam #1 (cont'd), ch 2 and Mic1 material, read ch 6 through 6.1, **assignment #2 submission cutoff at midnight (11:59:59) tonight.**
http://www.cs.uml.edu/~bill/cs305/ch6_memory_hierarchy.pdf
- 17 T **EXAM #1 on ch 2 and Mic1 material to date**, locality and the memory hierarchy, read ch6.2 – 6.3
- 19 R ch 6, Cache Memory, read ch6.4 – 6.4.3, Mic1 UART, **Assign #5 posted, read Assign #5**
http://www.cs.uml.edu/~bill/cs305/ch6_cache_memories.pdf
- 24 T Review exam # 1, assignment #5 discussed, Mic-1 UART organization and serial port programming and assignment #5 IO, read ch 6 Cache Organizations, read ch6.4.4 – 6.4.7, **assignment #3 submission cutoff at midnight (11:59:59) tonight.**
http://www.cs.uml.edu/~bill/cs305/Mic1_help_IO.pdf
http://www.cs.uml.edu/~bill/cs305/IO_str_and_echo.asm
- 26 R **Assign #4 due**, Memory hierarchy and Cache organizations, review ch 6, read ch6.5 – 6.7
http://www.cs.uml.edu/~bill/cs305/IO_str_and_scan_number.asm
http://www.cs.uml.edu/~bill/cs305/IO_scan_two_numbers_asm.txt
- 31 T Finish ch 6 and cache models, cache examples, read ch 7 on Linkers, 7.1 – 7.5
- Nov
- 2 R Introduction to linkers, ch 7 Symbol Tables, read ch7.6, **Assign #6 posted**
- 7 T **Assign #5 due**, Linkers, assignment #6 discussed, ch 7 Relocation, read 7.7 http://www.cs.uml.edu/~bill/cs305/ch7_linker_slides.pdf
- 9 R assignment #6 code examples , ch 7 Executables, read ch 7.8 - 7.10, **assignment #4 submission cutoff at midnight (11:59:59) tonight.**
http://www.cs.uml.edu/~bill/cs305/Linker_example.pdf
- 14 T Linking, static and dynamic, ch 7
- 16 R Dynamic Linking, ch 7 Shared Libraries, read 7.11, Review for exam #2, see exam 2 help file on-line
http://www.cs.uml.edu/~bill/cs305/Assignment_6_help_dir/
http://www.cs.uml.edu/~bill/cs305/Assignment_6_help_dir/example_linker_use.txt
- 21 T **EXAM #2 on ch 6 and 7, and Mic1 IO**, Exceptional Control Flow, read ch 8.2 -8.3, **Assign #7 posted, assignment #5 submission cutoff at midnight (11:59:59) tonight.**

- 23 R ***** **THANKSGIVING, NO CLASS** *****
- 28 T Exceptional Control Flow, read ch8 – 8.1
http://www.cs.uml.edu/~bill/cs305/ch8_exceptional_flow_slides.pdf
http://www.cs.uml.edu/~bill/cs305/ch8_processes_threads_slides.pdf
- 30 R Assign #6 due**, review exam #2, Exceptions and Processes, assignment #7 details and examples, ch 8 Processes and Threads, read ch 8.4 – 8.5
- Dec**
- 5 T Process Attributes and Control, finish ch 8
- 7 R Finish processes, system call interfaces and systems programming
- 12 T Review ch 8 and prepare for final
- 14 R Assign #7 due, Last class day ... Last chance to submit assignment #6 and/or #7 ... assignment submission queues closed at midnight (11:59:59 PM) tonight, December 14, 2023**

FINAL EXAM COVERAGE:

Book ch 2, 6, 7, 8 and Assign #1 through Assign #7

FINAL EXAM DATES (both exams in our classroom, FAL 313):

Section 201, 9:30 AM Final on Wednesday, December 20 from 8:00 – 11:00 AM

Section 202, 11:00 AM Final on Wednesday, December 20 from 3:00 – 6:00 PM