

**Syllabus<sup>1</sup>**

| Week starting       | Day | Topics <sup>2</sup>  | Reading (Sections) | Due  |
|---------------------|-----|--|--------------------|--|
| 12/01               | M/T | Course Overview  |                    |  |
|                     | W   | Term Project Overview  |                    |  |
|                     | R/F | Intro. To MIPS, SPIM*  | 3.1-3, A.9-10      | Teams, Proposed meeting times <sup>3</sup>                         |
| 12/08               | M/T | Conditional Statements*  | 3.5                |  |
|                     | W   | Procedures*  | pp. 132-135        |  |
|                     | R/F | Addressing modes*  | 3.8                |  |
| 12/15               | M/T | Representing Instructions*   | 3.4,3.7            |  |
|                     | W   | Exceptions   | 5.6, A.7           | First draft of your Assembly Language program for the term project |
|                     | R/F | Xilinx Installation*   |                    |  |
| <b>Winter break</b> |     |  |                    |  |
| 01/05               | M/T | Register Transfer Language   | 5.4                |  |
|                     | W   | Single-cycle datapath implementation                                   | 5.3                |  |
|                     | R/F | Multi-cycle datapath implementation                                    | 5.4                | Assembly Language and Machine Language specifications (M1)         |
| 01/12               | M/T | Group meetings and project time  |                    |  |
|                     | W   | <b>Exam 1<br/>7:00 – 9:00 PM<br/>Section 1: O 167 Section 2: O 169</b> |                    |  |
|                     | R/F | Group meetings and project time  |                    |  |
| 01/19               | M/T | Discussion on other architecture styles                                |                    | <del>RTL specifications (M2)</del>                                 |
|                     | W   | Control design (FSM)*  | 5.3-4              | RTL specifications (M2)  |
|                     | R/F | Control design (Micro-programming)                                     | 5.5                | RTL specifications (M2)  |
| 01/26               | M/T | ALU design*—Micro-programming  | 4.1-5              |  |
|                     | W   | Performance—ALU design   | Ch. 2              |  |
|                     | R/F | Performance (cont'd) Xilinx exercises II, III and IV                   |                    | Datapath and control specifications (M3)                           |
| 02/02               | M/T | Recursion and Stacks*<br>Performance                                   | Ch. 2              |  |
|                     | W   | Group meetings and project time  |                    | Component specifications (M4)                                      |
|                     | R/F | Group meetings and project time  |                    |  |
| 02/09               | M/T | Review, Xilinx exercise<br>Performance<br>Recursion and Stacks         | pp. 136, 141, A6   | Initial Xilinx model (M5)<br>(Monday for both sections)            |
|                     | W   | <b>Exam 2<br/>7:00 – 9:00 PM<br/>Rooms - TBA</b>                       |                    |  |
|                     | R/F | Xilinx exercise*   |                    | Initial Xilinx model (M5)<br>(Friday for both sections)            |
| 02/16               | M/T | Xilinx exercise*   |                    |  |
|                     | W   | Group meetings and project time  |                    |  |
|                     | R/F | Group meetings and project time  |                    | Final Xilinx model (Friday for both sections)                      |
| 02/25               | W   | <b>Project presentations</b>   |                    |  |

**Comment:** M2 deadline changed

**Comment:** M2 deadline changed again!

**Comment:** M5 deadline changed to Friday, 13<sup>th</sup> Feb. 2004

<sup>1</sup> This is a tentative schedule. It may be changed at the discretion of the instructor.

<sup>2</sup> Lessons marked with an asterisk (\*) include laptop-based in-class exercises.

<sup>3</sup> See the CSSE 232 (03-04 Winter) Term Project Requirements document for details about term project turn-ins.

|  |  |   |  |  |
|--|--|---|--|--|
|  |  | <b>1:00 PM and 6:00 PM</b><br><b>E104</b> |  |  |
|--|--|---|--|--|