

## Book Reading Plan (Fall 2019)

Course book:

"Computer Organization and Design: The Hardware/Software Interface" by David A. Patterson and John L. Hennessy (5th Edition)

Note: The plan might change for the Fall 2020 semester!

<b><i>Week#</i></b>	<b><i>Topic</i></b>	<b><i>Assignments</i></b>
<i>Week 1</i>	Introduction to Computer Architecture	RA chapter 1, Q1
<i>Week 2</i>	Performance Metrics of a System	RA chapter 1, Q2
<i>Week 3</i>	Number Systems	RA chapter 2, Q3
<i>Week 4</i>	Hardware Building Blocks (Combinational Logic)	RA Appendix B, Q4
<i>Week 5</i>	Hardware Building Blocks (Sequential Logic)	RA Appendix B, Q5
<i>Week 6</i>	<i>Instructions: Language of the Computer (Part I)</i>	RA chapter 2, Q6
<i>Week 7</i>	<i>Instructions: Language of the Computer (Part II)</i>	RA chapter 2, Q7
<i>Week 8</i>	Arithmetic for Computers	RA chapter 3, Q8
<i>Week 9</i>	Datapath, Controls and Pipelining	RA chapter 3, Q9
<i>Week 10</i>	Hazards: structural, data, control	RA chapter 4, Q10
<i>Week 11</i>	Memory Hierarchy Design	RA chapter 4, Q11
<i>Week 12</i>	Vulnerabilities in modern computers	RA chapter 4, Q12
<i>Week 13</i>	Modern Processors and GPU	RA chapter 4, Q13
<i>Week 14</i>	Revision	RA chapter 5, Q14