Chapter 1
Section 1.1 - **Subsections 1.1.1, 1.1.2, 1.1.3**
Figures **1-1, 1-2**
Terms:

- **Virtual machine**
- **Translation**
- **Interpretation**

Chapter 2
Section 2.1 - **Subsections 2.1.1, 2.1.5**
Figure **2-2**
Terms:

- **Pipelines**
- **Instruction-level Parallelism**
- **Superscalar**

Section 2.2 - **Subsections 2.2.2, 2.2.3, 2.2.4, 2.2.5**
Figures **2-4, 2-5, 2-6, 2-9, 2-11, 2-13, 2-14, 2-15**
Terms:

- **Memory / Cells**
- **Byte ordering / "endianness"**
- **Error correcting**
- **Hamming codes**
- **Parity**

Section 2.4 - **Subsection 2.4.1**
Terms:

- **Cache**
- **Split / unified**
- **Lines**
- **Locality principle**

Chapter 3
Section 3.2 - **Subsection 3.2.3**
Figures **3-18, 3-19**
Terms:

- **Arithmetic Logic Unit**
- **Adder**
- **Shifter**
- **Bit slice**

Section 3.3 - **Subsection 3.3.1**
Terms:

- **Latch**

Section 3.4 - **Subsections 3.4.1, 3.4.2, 3.4.3, 3.4.5**
Figures **3-35, 3-36, 3-37**
Terms:

- **Bus**
- **Width**
- **Arbiter**
- **Synchronous**

- **Asynchronous**

Chapter 4

Section 4.5 - **Subsection 4.5.1**

Figures **4-2***, **4-34***, **4-37, 4-38, 4-39** (* graphic only)

Terms:

- **L1, L2, L3**
- **Write through**
- **Write back**
- **Set-associative**
- **Direct-mapped**
- **Cache hit/miss**

CRAPS & C

Be prepared to interpret C and/or CHASM code and/or write it.