## **IB Computer Science Readings Structure**

The IB computer science course is divided into 8 content areas.

- Topic 1: System Fundamentals
- Topic 2: Computer Organization
- Topic 3: Networks
- Topic 4: Computational Thinking\*
- Topic 5: Abstract Data Structures (HL only)
- Topic 6: Resource Management (HL only)
- Topic 7: Control (HL only)
- Topic D: Object-Oriented Programming\*

The text we will use is divided into those same areas. For the topics discussed, you will be expected to read the material prior to the class discussions. You will need to absorb, synthesize, and analyze the material. Simply reading the material is insufficient.

**WARNING**: Your submission should not include any personally identifiable information. This includes your name, classes taking, personal interests, or anything else which could be used to figure out who you are. If I can identify you from the submission, there will be a 25 point penalty applied to your submission.

Your submission should include four components

- **Vocabulary**: List all the new words and their definitions. At *minimum* your list should include all the italicized words, but it completely appropriate to include other words with which you are not familiar (even if not related to computer science). Definitions should be in your own words and should not be plagiarized from a dictionary or glossary. Examples of word usage are also appropriate in this section.
- **Big Ideas**: List out the big ideas from the book. This should be more than simply listing sentences you read. This section should include new insights and your thoughts as you read. While you don't need to write an essay, this should be professional writing which should include complete sentences and proper spelling and grammar. If you cite the book, include page number. When directly quoting, please include the passage in quotes. Directly quoted portions should not exceed 10% of this section.
- **Book Questions and Responses**: Answer all questions in the book. Yes there are answers listed after very question. You should answer them yourself before reading the answer. Please expand on the book's answers where appropriate (which is often). Your answer should include the question as well as your response.
- **Lingering Questions:** Include any other questions you still have. If you didn't have any questions while reading, you didn't read close enough. Feel free to include questions you had, but have since answered with further independent research.

Your submission will be scored for 70 points. Each of the four components will be scored independently for 15 points each plus 10 points for the structure and organization of your submission. It should be very clear what is included and where the sections begin and end. Feel free to use an outline format, but your submission should not be an outline.

<sup>\*</sup>Notes that these topics were taught in the year 1 course.

Your submission will be reviewed anonymously by three of your classmates. You will receive a 0 on any review where you identify yourself as the reviewer. The identification can be in the format including both online and in person. Reviews should be as anonymous as possible.

If your readings are submitted late, they will not be placed in the peer review pool and thus you will receive a 0 for each of the reviews you are expected to do.

Each of your reviews should have 4 components.

- Give each component a score out of 15. You need a score as well as a <u>detailed</u> explanation as to why. If you deduct points, explain why. If you give full credit, explain why. Be sure to reference from where in their document you gathered you evidence.
- Find three things the author did well or that are noteworthy.
- Find three things the author should improve in the future.
- Find three things that you learned by doing this review. As a teacher, I still learn things from student's reviews. If I can learn things, so can you.

Your review should be far more than a "Good Job". It should be detailed and insightful. If you can do the whole thing in under 15 minutes, you went way too fast.

In Canvas the box to write a review is very small. I would suggest typing it in a word processor and then copying and pasting it into the box once it is complete. Do not think that the size of the box is sufficient for your entire review.