ATOMIC MICROSCOPE: Directions for Atomic Microscope Lab reports

1. Each report is worth 15 points.

2. Due dates will be announced one or two weeks in advance. Late submissions will receive no credit.

3. Given the limited number of computers with the AM software, you may work in teams of two. Each team should submit a single lab report with both co-authors listed. You may discuss the labs with other students, but each team must write its own report independently in its own words. I would prefer that each team member contribute equally to performing the lab, analyzing the results, and writing the report. If you split these responsibilities, please indicate in the report who did what, and be sure to split these activities differently in future labs.

4. You may consult other reference books and publications. If you do, please cite the source for each idea or explanation obtained this way and provide a complete reference (author, title, publisher, year, and page) for it. Material based on Reif or class lectures does not require a reference. *Websites are not valid reference sources.* You may search websites to get started, but be sure to find and cite a book or journal article that supports the data or information you locate on a website.

5. Include a brief introduction (a short paragraph). Briefly present your results. Include printouts of screenshots. Contrast regular with unusual or irregular behavior. Conclude with a brief discussion section (one or two paragraphs). Provide short answers to the questions in the Analysis sections. The length of each answer will depend on the question and on your individual writing style. You may use the Analysis Report Form that I handed out. The open spaces should give you a rough idea about the length of the answer I expect. The overall length of your written report should generally not exceed two pages plus additional pages for your screenshots.

6. Write clearly and logically. Use proper terminology. Make sure your spelling, punctuation, and grammar are correct. I would prefer reports prepared using a word processor, but neat, handwritten reports will be accepted. Write legibly. If I can’t read your report, I won’t correct it. As a rule, lengthy mathematical derivations should not be needed, but you may highlight your answer with an appropriate formula or two. These may be handwritten even if the rest of your report is done with a word processor. (Just leave blank space for filling in the formulas.)

7. Room 213 is unavailable on M W 6-7:50 pm every week and 1 – 2:50 pm on the following Fridays: 1/27, 2/10, 2/24, 3/10, 4/7, 4/21. Please plan accordingly.