

Annotating in Perusall.com

(partially adapted from Professor Eric Mazur)

Why annotate?

Annotating the text helps you and us. First, you get practice reading a technical textbook. Once you graduate, books will be your primary vehicle for learning and, trust us, learning does not stop when you graduate. If you can learn from books, you have mastered an important lifelong skill. Second, by reading with attention and with an inquiring mind, you take ownership of your learning. That skill too will be useful for your whole life (in fact, you may want to start reading ahead in some of your other science classes to get more out of those classes; you'll have to read those books at some point anyway!).

Third, by annotating the text, you are reversing the roles of student and teacher: for a change you are the one determining what's wrong or confusing. In a traditional class, it's always the teacher telling you what is wrong or confusing about your work. When you annotate the text because you are confused, you have identified a problem in the text: you are right and the author is wrong! By communicating that confusion to others, you create an opportunity to address the confusion and learn. If many people in the class express confusion about a particular topic, we will know that we need to address that confusion in class or online.

How (much) should I annotate? (what we expect)

As we have no lectures, the reading is your initial –and in some sense primary – exposure to the content of this class. It is therefore essential that you study each chapter with an inquisitive mind. Your annotations can either be queries, comments, or answers/reactions to queries or comments posted by others.

When we look at your annotations we want them to reflect the effort you put in your study of the text. It is unlikely that that effort will be reflected by just 5 or 6 annotations per chapter, unless your annotations are unusually thoughtful and stimulate a deep discussion. On the other extreme, 30 per chapter is probably too many, unless they are

very superficial comments or questions. Somewhere in between these two extremes is about right.

Last year the mean number of annotations per student was about 10/chapter. This year we expect that you will make at least 10 annotations per chapter or assignment. There will typically be two assignments per week. These will usually be a chapter in the book or part of a chapter in the book. Callister's Intro to Materials is an excellent textbook and has evolved steadily over the last several decades. The amount of reading may seem overwhelming at first, but realize that this is the same pace that we have expected students to work in this class for more than 50 years. If you have not read textbooks in the past, you will experience a learning curve. However, it is really not that hard to learn how to read a textbook efficiently and quickly. In fact, annotation really helps you read the book in a way that is more fun than just slogging through the pages.

Last year the median score for the annotations was 90% out of 100%. The students really took to the concept and did very well. To help you learn how to become excellent annotators we are going to drop the lowest 5 scores you get on individual assignments. There will be 23 reading assignments. Hence by letting you drop 5 we believe that we are being very fair about the fact that we realize that this is a lot of work and there will be times when you just won't be able to get to the assignment. Please use these wisely. It should only take one assignment to figure out what you are doing right or wrong. That will leave you with 4 to use as breaks from your other classwork.

How does it work?

You will receive instructions on how to create an account on perusall.com that will link you to this class. If you are reading this, you will have purchased the correct copy of the electronic version of the book which is a requirement of the course. Once you log on to perusall.com you will see the reading assignments that are currently due and those that will be due in the future. There is no penalty for reading and annotating ahead of any deadlines. perusall.com is a very nice reader and annotation system. The reader scales the text similar to a pdf which will allow you to zoom in or out of the page. To annotate, you simply highlight the portion of the text that you want to

annotate and a window will appear for you to annotate. You will notice that perusall.com will automatically categorize your annotations as whether or not it is a question or a comment. You can also see the annotations of your classmates in real time. You can add links in your annotations and you can also annotate other annotations. There are 83+ students in the class this term. You will not have to read all of the annotations for all students. We will be breaking the class into groups of 25 to 30 so that you have a reasonable number of annotations to view. The process is really simple and looks a lot like Facebook.

When do I get feedback on my annotations?

The syllabus lists the recommended reading schedule; it is your task to stay on top of this schedule and plan your time accordingly. Each assignment has a deadline, which is 12:00 pm on the day of class. It probably pays not to wait until the last minute, so as to give others in the class an opportunity to respond and thus maximize the benefit of your annotations.

We will provide an overall assessment of your annotations when the assignment is due using the evaluation rubric on the next page. We will continuously monitor the annotations to make sure burning questions are addressed, but we will always first allow others in the class an opportunity to answer or resolve queries before jumping in. After the class has the opportunity to participate, we may decide to contribute to the discussion, if necessary.

How will my annotations evaluated?

Your annotations will be evaluated on the basis of both quality, quantity, and timeliness. Your goal is to demonstrate significant timely and thoughtful reading of the text. As stated in the syllabus, 25% of the course grade is based on your annotations of the text. Your annotations, like most of the other course components, are evaluated on (genuine) effort. What matters is that you convince us that you have engaged in thorough and thoughtful reading and insightful interpretation of the text. All grading of annotations is qualitative and we do our best to ensure fairness in grading. We do not have the time, and will not argue about individual annotation grades. We believe that by permitting you to drop the lowest 5 scores and only counting the 10 highest

annotations per assignment should more than compensate for any grading anomalies. In addition, we are allowing you to have a "grace period" to improve your scores by making more annotations after the assignment deadline. You are highly encouraged to make at least 20 annotations per assignment as we will only count the top 10 annotations for your score. Once you are confident that you are annotating at the highest level of quality, you can reduce the number of annotations per assignment if you choose.

The Grace Period:

If for some reason you are unable to complete an assignment on time we will provide you with a 3 day grace period to provide you with a chance to improve your score. However, you can only do this by answering questions that others have posed in the assignment. Your answers must, as always, convince us that you have read the book thoughtfully and the quality will be graded. The reason we are offering this grace period is that we believe that continuing discussions about the book represents a high quality of learning and we can reward those who chose to do this. After the 3 day grace period, there will be no option to improve your score on the assignment.

How will my annotations evaluated?

There may be changes to the grading rubric as we near the beginning of class. If there are any changes, it will be outlined in the announcements section of Canvas.

Your annotations will be evaluated on the basis of both **quality, quantity, timeliness, and full coverage**. Your goal is to demonstrate significant, timely, and thoughtful reading of the text. Each assignment is graded separately. You will typically get two assignments per week that are each due at NOON on the day of class (Tuesdays and Thursdays at NOON). The grace period will end three days later at NOON on that day (Fridays or Sundays at NOON). The grades will be released at end of the grace period.

We calculate the score as follows: Final score = [Average of the top 10 (quality*timeliness) scores] - 1 point for lack of even coverage. The highest score is a 10 for any assignment.

Quality

Score	Description & Criteria
10	Demonstrates thorough and thoughtful reading AND insightful interpretation of the text.
5	Demonstrates reading, but no (or only superficial) interpretation of the text.
0	Does not demonstrate any thoughtful reading of the text.

Timeliness

You must turn in your assignments on time or you will not get any credit for that assignment. We realize that this is a significant amount of work and you may not be able to get all of the reading done in time. We also realize that it may take a few assignments to learn how to score highly on the quality of your annotations. Hence, we will drop the lowest 5 scores.

Please note that your “timeliness” score is machine-computed and the system is very “hard-nosed” – if you miss a deadline by just one second, your score goes down. We don’t have the resources to either evaluate this criterion by hand or make adjustments on a case by case basis, so the computer will be the unbiased judge of your timeliness!

Quantity

You must submit 10-30 annotations that cover all sections of each reading assignment. We will take the top 10 scores and average it for your grade.

Coverage

If you don’t cover all of the sections you will lose 1 point from your final score. Example: If you make 15 annotations that are submitted before Noon on the day of class and the best 10 average to a score of 8 (say you got 6 10s and 4 5s), but you did not cover the entire chapter, you would only get a 7 out of 10 - or 70%.

See the examples on the course website to see the quality criterion applied to sample annotations.