

# How to Ace Professor Brown's Exams

## Lecture

- Go to lecture every day and take detailed notes.
  - Pay special attention to what Professor Brown *says*. Goofy stories aside → many molecules, methods of regulation, etc. are very important and will show up on the exam even though he does not write them on the board.
  - If you find this difficult, consider bringing a tape recorder.
- Do problem sets as they are assigned.
  - Problem sets take *time* and *patience*.
    - The questions are not theoretical, like with Professor Yaffe. They are pure chemical pathways, meaning they are time consuming and detail oriented.
    - Pace yourself: you cannot do all the problem sets the night before the exam and get what you should from them.
  - Do not try to shortcut them by looking at the answer key as you work them! You will not develop the necessary problem solving skills this way.
- Go to the Friday morning review sessions. Every year, problems that he demonstrates at the morning sessions mysteriously appear on exams.



## Recitation

- Go to recitation! (You like me, you know it ☺) Again, take detailed notes. There will be material reviewed that you probably did not catch in lecture. If it's mentioned in lecture, it's fair game for the exam. If it's mentioned in recitation, expect something like it on the exam.
- Do any and all problems handed to you in recitation as well. They will be your best practice for your exam.

## Roadmap

- Start making your roadmap *now*
  - Make it neat, make it detailed
  - Your recitation and lecture handouts contain all of the necessary parts. Make sure to put it all together! You should be able to take any molecule presented in lecture and take it through its pathway.
- For the exam, make multiple copies or place in a sheet protector
  - Circle starting materials and products. Note: starting materials sometimes *resemble* what is presented to you in lecture. Look for similarities!
  - Cross out pathways that will not work under the conditions of the problem
  - Follow a pathway

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## Exam Day

- Pace yourself. You want to get as many points as possible. Avoid getting stuck on one question. Time is of the essence on these exams!
- The exam is 80 minutes long (assuming 9:35-10:55; though the exam will probably begin at exactly 9:30, so don't be late!)
  - Budget to finish the exam in 70 minutes, so you have 10 to spare.
  - Allow yourself time on each question related to the number of points the question is worth.

10 points	7 minutes
15 points	10.5 minutes
20 points	14 minutes
25 points	17.5 minutes
30 points	21 minutes
50 points	35 minutes

- When drawing pathways
  - Utilize your roadmap, as mentioned above.
  - Draw all intermediates and known enzymes, unless told otherwise.
  - If necessary, show the enzyme's mechanism.
  - Make sure to account for all materials. For example, if you use  $\text{NAD}^+$  somewhere, make sure you regenerate it somewhere in your pathway, unless he specifies otherwise.
  - Make sure you can write a balanced equation that your mechanism reflects. Example: One molecule of Fructose 1,6-diP becomes two molecules of Glyceraldehyde-3-P. Make sure that in the rest of the pathway towards and including pyruvate, you note that there are two of every molecule!