

## Department of Chemistry - Macquarie University

### Student Learning Experiences in the Laboratory

This survey will be used by the Department of Chemistry for the purpose of maintaining or improving the quality of this experiment for teaching purposes. Your cooperation in completing this anonymous form is greatly appreciated. It is not connected in any way to your assessment for this unit. Completion of this survey is voluntary.

Occasionally we would like to release this information into the public domain, for instance through presentations at conferences and publication in articles for journals. Such publication encourages discussion on good teaching practice. We would appreciate receiving your permission to publish your anonymous comment. If you **do not** wish to release your comments, please tick the box below.

**I do not give permission for my comments to be used beyond the Department of Chemistry, Macquarie University.**

The ethical aspects of this study have been approved by the Macquarie University Ethics Review Committee (Human Research). If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Research Ethics Officer (telephone [02] 9850 7854, fax [02] 9850 8799, email: [kdesilva@vc.mq.edu.au](mailto:kdesilva@vc.mq.edu.au)). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

Unit: CHEM102

Experiment Name or Number: EXP 3 – DISSOCIATION CONSTANTS OF WEAK ACIDS AND BASES

1 Did this experiment help you to understand the theory and concepts of the topic? If so, how, or if not, why not?

*Yes. Practicing doing the same thing over and over helps me learn about the concentration better.*

*Yes, brought back knowledge thought lost from high school by the questions asked.*

*Yes, it was easier to apply experimental data to the equations used so that you can understand where the numbers are coming from.*

*Yes, it helped show relationships between pH, Ka, pKa etc and demonstrated how these are used in reality.*

2 How is this experiment relevant to you in terms of your interests and goals?

*It is not.*

*Not overly.*

*I am interested in chemistry in general. That's about as far as it goes.*

*It is relevant in that it helps explain the theory more clearly, but in the long term it might not affect my overall goal as I'm not sure if I want to major in chem.*

3 Did you find this experiment interesting? If so, what aspects of this experiment did you find of interesting? If not, why not?

*Not very much, we have titrated stuff in all our experiments.*

*Yes it was interesting. The neutralization and partial neutralization.*

*No, it is doing lots of titrations, but you couldn't learn the principles of these equations in (an?) interesting way.*

*Yes, it was good to see how the titrations worked and using a pH meter was also interesting as I have not ever used one before.*

4 Can the experiment be completed comfortably in the allocated time? Is there time to reflect on the tasks while performing them?

*Yes. Plenty.*

*Yes.*

*Yes.*

[Redacted]

5 Does this experiment require teamwork and if so, in what way? Was this aspect of the experiment beneficial?

*No.*

*The experiment doesn't require enough teamwork.*

*Yes, it should all be done with a partner. That way you can pay more attention to detail.*

[Redacted]

6 Did you have the opportunity to take responsibility for your own learning, and to be active as learners?

*Yes.*

*Yes.*

*Yes.*

[Redacted]

7 Does this experiment provide for the possibility of a range of student abilities and interests? If so, how?

*Yes, but it gradually becomes slightly difficult in certain areas.*

*?*

[Redacted]

8 Did the laboratory notes, demonstrators' guidance and any other resources help you in learning from this experiment? If so, how?

*Yes, the lab notes explained everything clearly and allowed for completion of the experiment. My demonstrator provided guidance on the notes allowing a full understanding.*

*Yes, explained questions enabling me to understand.*

*Yes – the demonstrator was helpful.*

*The demonstrator's guidance is key, as even after preparing for an experiment some parts remain unclear.*

9 Are there any other features of this experiment that made it a particularly good or bad learning experience for you?

*The fact that we were titrating again made it bad but other than that it was good.*

[Redacted]

10 What improvements could be made to this experiment?

*The experiments should be done in groups of 2 as it increases learning by teaching and explaining to class mates.*

*It (?) the way (?) , puts the point across.*

[Redacted]

11 Any Other Comments