

Appendix A

Chemistry Self-Efficacy Questionnaire

Degree/Diploma enrolled for	
Age	
Gender (Male or Female)	
School attended	

This questionnaire **is not** a test! There is no right or wrong answer to each question. The best answer is whatever you think or feel is true. None of your lecturers and nobody in your university will know what you've answered on this questionnaire.

It is very important that you answer the questions seriously and mark what you truly think or feel. Your answers will help us improve the way science is taught in your and other universities.

In the questionnaire you are asked to mark which answer best fits what you think. **For example**, if the following sentence appears:

	Very poorly	Poorly	Average	Well	Very well
I like vanilla ice cream very much.	1	2	3	4	5

A student that likes vanilla ice cream a lot will circle the number **5 – Very well**. If you like vanilla ice cream, but it's not your favorite ice cream, you can circle number **4 – Well**. If you like vanilla ice cream just a bit, you can circle number **3 – Average**. If you don't like vanilla ice cream you'll circle number **2 – Poorly**. Finally, a student that doesn't like vanilla ice cream at all will circle the number **1 – Very poorly**.

Attention! Every now and then there are sentences that state what you **don't** like or **don't** do. For example:

	Very poorly	Poorly	Average	Well	Very well

I don't like vanilla ice cream at all.	1	2	3	4	5
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In this case a student that likes vanilla ice cream very much would circle number **1 – Very poorly**, and a student that doesn't like vanilla ice cream at all would circle number **5 – Very well**.

	Very poorly	Poorly	Average	Well	Very well
1. To what extent can you explain chemical laws and theories?	1	2	3	4	5
2. How well can you choose an appropriate formula to solve a chemistry problem??	1	2	3	4	5
3. How well can you establish the relationship between chemistry and other sciences	1	2	3	4	5
4. How well can you describe the structure of an atom?	1	2	3	4	5
5. How well can you work with chemicals?	1	2	3	4	5
6. How well can you describe the properties of elements by using periodic table?	1	2	3	4	5
7. How well can you read the formulas of elements and compounds	1	2	3	4	5
8. To what extent can you propose solutions to everyday problems by using chemistry?	1	2	3	4	5
9. How well can you interpret chemical equations?	1	2	3	4	5
10. How well can you explain the particulate nature of matter?	1	2	3	4	5
11. How well can you construct laboratory apparatus?	1	2	3	4	5
12. To what extent can you explain everyday life by using chemical theories?	1	2	3	4	5
13. How well can you collect data during the chemistry laboratory?	1	2	3	4	5
14. How well can you interpret graphs/charts related to chemistry?	1	2	3	4	5
15. How well can you use the equipment in the chemistry laboratory?	1	2	3	4	5

16. How well can you understand the news/documentary you watched on television related to chemistry?	1	2	3	4	5
	Very poorly	Poorly	Average	Well	Very well
17. How well can you interpret data during the laboratory sessions?	1	2	3	4	5
18. How well can you write a laboratory report summarizing main findings?	1	2	3	4	5
19. How well can you solve chemistry problems?	1	2	3	4	5
20. How well can you carry out experimental procedures in the chemistry laboratory?	1	2	3	4	5
21. How well can you recognize the careers related to chemistry?	1	2	3	4	5