Final report: 5KE165HT20 Foundations of Chemistry

Unit code: 5KE165  
Name of course: Kemins Grunder/Foundations of Chemistry  
Credits: 15 hp  
Pace: 100%

Semester: Fall 20 (Dates: 02/11/20 -- 17/1/21)  
Unit coordinator: Andy Ohlin  
Delivery (campus/online-remote): ‘campus’ (due to COVID-19 all but the first two weeks were delivered online)

Indicate if the unit is part of a program:  
Part of BS in Life Sciences (Fall)/ BS Biotechnology (Spring).

| Number of registered students | 48 registered*  
|                              | (31 Life Sciences, 5 Biotech, 9 other)  
|                              | <38 students attended lectures  
|                              | 28 students completed the labs |

| Number of responses on unit evaluation | 34  
|                                       | (27 Life Sciences, 2 Biotech, 1 Teacher, 4 other) |

<table>
<thead>
<tr>
<th>Grade</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fail (U)</td>
<td>9</td>
<td>34</td>
</tr>
<tr>
<td>Pass (G)</td>
<td>10</td>
<td>38</td>
</tr>
<tr>
<td>High Pass (VG)</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>Grade 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Grade 4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Grade 5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Completes</td>
<td>26</td>
<td>54</td>
</tr>
<tr>
<td>Incompletes</td>
<td>22* (48-26)</td>
<td>46*</td>
</tr>
</tbody>
</table>

* Many were re-registered students from previous cohorts  
Data was retrieved from LADOK on 4/3/2021
Course evaluation
<<See appendix>>

Comment by unit coordinator:
In addition, the students were asked to rate the different sections of the course. All sections achieved at least a passing grade (3), and most were rated 3.5-4.4 (out of five).

However, it is clear that the following external factors also impacted the ratings:
* After two weeks of teaching the university shut down due to COVID-19 without warning. All planned on-campus instruction thus had to be moved online at no notice.
* The first three sections were delivered as lectures on campus, which most students preferred
* There were teething problems with technology for some of the lecturers owing to the sudden change from on-campus to online teaching, which led to dissatisfaction with the lectures, regardless of the actual pedagogical performance.

Summary of comments by the students:

Q: ‘What aspects of the course are you MOST satisfied with?’

26 comments
Clear structure with clear goals, good resources, good teachers with good attitudes, the content was good/useful/interesting, that lectures were recorded

Q: ‘What aspects of the course are you LEAST satisfied with?’

30 comments
The labs being given as virtual online-labs, some lab reports were too demanding, some of the lectures (technical issues), that lectures were moved online, Zoom in general, too much/too little time, different messages from lab assistants vs lecturers about certain labs

In general respondents understood that moving online was unfortunate but necessary.

Q: ‘Anything else you’d like to add?’

20 comments
General unhappiness with different aspects associated with the course being given online and technical issues associated with this. One student also emphasised that there was often no space for students to participate actively in online lectures.

Summary of changes introduced after the last time the course was delivered

Virtual labs (planned) and online lectures via zoom (unplanned)
Summary of suggested changes prior to the next time the course is delivered

Focus on improving the social environment for the students, focus on introducing student-active activities, improve the virtual labs in general (streamline)

Final report created 4/3/2021, by Andy Ohlin
Appendix.
Course evaluation 5KE165HT20

Comments by students have been removed. Data that identifies individual teachers has been removed.
Course evaluation 5KE165 HT20

Teaching in a pandemic poses special challenges. Make sure to answer all the questions to the best of your ability so that we can improve the course, and also so that we take the right lessons with us from 2020 in terms of how to do hybrid teaching.

There are 12 pages, including this one. Most questions use a slider or are multiple choice. The last three slides have opportunities for you to enter text.

Thank you!

Andy
Which program are you in?

- Life Sciences: 27
- Biotechnology: 2
- Bio- and geosciences: 0
- Teacher: 1
- Other/none: 4
Course-specific questions

- I'm satisfied with the course: 3.5
- What I learned was interesting: 3.8
- What I learned will be useful: 4.2
- The course was challenging -- in a good way: 3.4
- The course was TOO difficult: 2.4
Course-specific questions

- I'm happy I took this course: 4
- I would like to take more chemistry in the future: 3.2
- I felt part of a community with the other students: 2.2
- The atmosphere was open and inclusive: 3.1
Course-goals and understanding

- The course content was what I expected: 3.7
- My learning benefited from the way the course was organised: 3.1
- The teachers taught in a way that I could understand and follow: 3.1
- It was clear to me what I had to know/learn in order to pass the course: 3.6
Time, Pre-requisites, Situation

- My level of knowledge before the course was sufficient: 3.4
- I was able to get help if I needed/wanted to: 3.9
- I had opportunities to interact/discuss with my classmates: 3
Rating of resources

- Online labs: 2.4
- Canvas: 3.9
- Videos: 3.9
- Book: 3.8