Emails to all Chem 213 students and tutorial instructors - Fall 2019 I typically send emails to everyone in the tutorials about once a week. Sometimes these seem to go astray or to the wrong email address, so a record of those emails will be kept here. - Kelli

From: fawkesk@uvic.ca Sent: Wednesday, Dec 4, 2019 2:00 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to final exam (Dec 16)

Hi Chem 213 students,

Just a few reminders as you start preparing for the final exam:

1. Marked T8 booklets are available for pick-up from my office (Ell 334a) if you didn't already collect it at the last lecture. Your tutorial grades are posted on the tutorial website - please check these for errors and let me know of any problems by Monday Dec 9<sup>th</sup> at the latest.

2.	Dave Berg has	extra office hours	next week to answer	vour questions.

Monday Dec 9	1:30-3:30 pm	Ell 226
Tuesday Dec 10	12:30-2:30 pm	Ell 226
Thursday Dec 12	1:30-3:00 pm	Ell 230
Friday Dec 13	2:00-4:30 pm	Ell 228

# Final exam on Monday Dec 16<sup>th</sup> at 9 am in ECS 116

- 3. This year's final exam is similar in format to the 2016 and 2018 exams. There will be 24 multiple choice questions (36 points), and 6 structures A-F (114 points). One more structure will be worth up to 10 bonus marks; it is recommended that you leave bonus structure G until the end of the exam as it is more difficult. The exam will be marked out of 150 points.
- 4. You will be supplied with copies of the yellow data sheets (pages A1-A10) in the exam. These will be on a different color paper but in the same format as you are used to working with in the course so far.
- 5. You will be asked to leave your bags, phones, hats, jackets at the front of the room or in the seat beside you (if space permits). Please turn off your phones and take everything you need from your bag before the exam starts. You may have assigned seating.
- 6. Make sure you bring adequate supplies: pencils, eraser, calculator (non-programmable, preferably Sharp EL-510R/RNB), student ID, watch, etc. Blank paper will be supplied for rough work and you can always put up your hand and request more if needed.
- 7. Trips to the washroom will be escorted by an invigilator.
- 8. At the end of the exam you will hand in a green multiple choice bubble sheet and a small booklet with your structure answers. The question package will not be collected (you can take it home if you wish) so you must make sure all your answers are transferred to the answer pages before the 3hr period ends. The answer key will be posted on the website shortly after the exam.

Good luck on the final exam!

Cheers,

Kelli

From: fawkesk@uvic.ca Sent: Friday, November 29, 2019 6:35 AM To: Chem 213 students and instructors Subject: Chem 213 information (Nov 29 - Dec 4)

Hi Chem 213 students,

Congratulations on completing the 213 tutorials. Your marked T8 booklet will be available for pick up at the last lecture on Wednesday Dec 4<sup>th</sup>. I'll be there before the start so please come early. If you miss me just stop by my office (Ell 334a) after class.

**Please check your posted tutorial scores and report errors to me by Monday Dec 9<sup>th</sup>** (at the latest). You can find these on the tutorial website under "marks". After the final exam, these marks will be combined with your lecture scores to generate your course grade. The tutorials are worth 25%.

The last two lectures (Tuesday Dec 3 and Wednesday Dec 4) will be dedicated to a review of the 2018 final exam structure questions. I will send you another email on Friday Dec 6 with further details about the exam and Dave's extra office hours in the week of Dec 9-13.

The final exam is on Monday Dec 16 at 9:00 am in ECS 116.

Lecture is cancelled today, Friday Nov 29. Enjoy an early start to your weekend.

From: fawkesk@uvic.ca Sent: Friday, November 22, 2019 3:30 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to Tutorial #8 (Nov 28)

Hi Chem 213 students,

Just a few reminders before your LAST tutorial (try not to be too sad): 1. Your last tutorial will cover mass spec and UV-Vis. **Please read over pages C87-98 in preparation** if you have time. You can check your practice problem answers on the website.

2. **Please check your posted tutorial scores** and report errors to me by Monday Dec 9<sup>th</sup> (at the latest). You can find these on the tutorial website under "marks". After the final exam, these marks will be combined with your lecture scores to generate your course grade. The tutorials are worth 25%.

3. You can complete assignments 7 & 8 now that these topics have been fully covered in the lecture and tutorial. You will have all the information for assignments 9 & 10 (mass spec & UV-Vis) by the time you complete the last tutorial.

4. Quiz #5 is due Friday Nov 29<sup>th</sup> before 1:30 pm in the drop-box. It will be based on assignments 8 & 9 and is available on the lecture website.

5. The last two lectures (Tuesday Dec 3 and Wednesday Dec 4) will be dedicated to a review of the 2018 final exam structure questions.

From: fawkesk@uvic.ca Sent: Friday, November 15, 2019 2:00 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to Tutorial #7 (Nov 21)

Hi Chem 213 students,

Just a reminder of Dave's remaining extra office hours for the upcoming midterm. Monday Nov 18<sup>th</sup> 9:30 -11:30 am in Ell 314

# Tuesday Nov. 19- Midterm #2 at 1:30 pm in ECS 123

Your next tutorial (**T7**) will introduce the last few topics of nmr and 2-dimensional analysis. It would be a good idea to **read pages C81-86 and try the practice problems before attending** if you can find the time, but it has all been covered in the lectures already and your tutorial instructor will review the key points before you start the booklets.

This tutorial is a little shorter than the others and will take less than 3 hours for most students to complete. It ties together many of the previous nmr concepts so if you have the hang of it now, it should be smooth sailing. If you hate tree diagrams you will be happy to hear that this is the last NMR tutorial...only one more after that on mass spec & UV/Vis. ©

From: fawkesk@uvic.ca Sent: Wednesday, November 13, 2019 3:30 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to MIDTERM #2

Hi Chem 213 students,

I hope you enjoyed a chance to relax over reading break and got an opportunity to start studying for the next midterm. **Tuesday Nov. 19-** Midterm #2 at 1:30 pm in ECS 123

Dave is offering extra office hours to help you prepare. Thursday Nov 14<sup>th</sup>, 1:30 - 3:30 pm Friday Nov 15<sup>th</sup>, 2:30 - 4:00 pm Monday Nov 18<sup>th</sup>, 9:30-11:30 am

As you start studying for the up-coming midterm you will quickly realize that you need to have some facts memorized in order to succeed, many of these are repeated from midterm #1.

Here's a list of the minimum facts you should know:

IR values - all functional groups which occur >1500 cm<sup>-1</sup>

(ie: OH, NH, COOH, C=C, C=N, CHO, and all the different types of carbonyls (C=O)) Knowledge of the fingerprint region (<1500cm<sup>-1</sup>) may be helpful but it is primarily used to confirm a structure, not solve it from scratch.

## <sup>1</sup>H nmr shifts

- **COOH** (~10-12ppm)
- **CHO** (~9-10ppm)
- alkenes (~5-7ppm)
- the data in the three boxes at the bottom of **page 101** (alkanes, methyls on an electronegative atom, the effect of adding an additional electronegative atom)
- the data in the box at the top of **page 106** (methyls on a double bond, benzene)
- the effect of placing an electron withdrawing or electron donating group on a benzene ring as summarized on the diagrams at the top of **pages 108 & 109**.

# <u>Coupling constants</u> - all ${}^{3}J_{HH}$ values are ~7 Hz except

- trans alkene (~16 Hz)
- cis alkene (~8 Hz)
- gem alkenes (~2 Hz)
- aldehydes (~2 Hz)
- in general  ${}^{1}J >> {}^{2}J >> {}^{3}J$  etc. and the general values are given in the small box at the top of **page 97**.
- ${}^{4}J_{HH}$  are usually ~2 Hz and can only be seen when we zoom into a spectrum that was recorded above ~200 MHz. The old midterms always show a 0-10 ppm region with no expansions so focus on the pattern due to coupling constants larger than ~5 Hz since that is what is visible to the naked eye.

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## 13 C nmr shifts

- carbonyls in **aldehydes** and **ketones** (~190-220ppm)
- carbonyls in **acid derivatives** (~160-180ppm)
- alkenes, aromatics and nitriles (~100-160ppm)
- **alkynes** (~70-90ppm)
- **alkanes** range from ~10-80ppm depending on the presence of electronegative substituents such as oxygen, halides, etc.
- the data in the box at the top of **page 152** (simple alkanes)
- the data in the box at the top of **page 153** (carbons in a benzene ring)

You will be supplied with relevant information from the yellow data pages that is directly needed for a calculation question (ex: benzene and alkene shift predictions).

As Dave has already told you, **the midterm will cover content up to page 192 in the manual and tutorial T5b**. There will be no 2D NMR questions on the midterm. The best preparation for your upcoming midterm is to do the relevant questions from the old midterms and final exams which are on the course website. Keep in mind that some content in older exams may not be covered on your midterm as the date of the exam varies from year to year.

Your midterm will have 10 multiple choice questions (2 marks each), 2 structure problems (25 marks), and a bonus question (max 5 marks bonus); Dave may give you more details later in the week so it is a good idea to attend the Friday Nov 15<sup>th</sup> lecture which will focus on the upcoming midterm by reviewing last year's exam. It is also a good idea to try the **extra problems** that Dave has posted on the lecture website.

From: fawkesk@uvic.ca Sent: Friday, November 8, 2019 2:30 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to Reading Break (Nov 11-13)

Hi Chem 213 students,

Just a reminder that there are no tutorials next week (Nov 14). We hope you enjoy your time off over **Remembrance Day (Nov 11) and Reading Break (Nov 12-13)** and this gives you plenty of time to study for the next midterm.

If you would like to review your marked T5b booklet before midterm #2 you will need to pick it up from me by attending the lecture on Friday Nov 15<sup>th</sup>. I'll be there at the start so please come early. If you miss me just stop by my office (Ell 334a) after class.

In preparation for your next midterm (Tues Nov 19 at 1:30 pm in ECS 123), Dave has scheduled extra office hours to answer your questions in Ell 314.

Thursday Nov 14<sup>th</sup>, 1:30 - 3:30 pm Friday Nov 15<sup>th</sup>, 2:30 - 4:00 pm Monday Nov 18<sup>th</sup>, 9:30-11:30 am

Your next tutorial will be Tutorial #7 on Thursday Nov 21<sup>st</sup> to cover the last few nmr topics. I will send you an email with more details on Friday Nov 15<sup>th</sup>. (In the past, Tutorial #6 was assigned as homework over Reading Break but that has been eliminated from the course, so just ignore that deadline instruction if you are using an old manual).

Now would be a good time to check that your posted tutorial grades have been entered correctly. These are on the tutorial website (<u>https://web.uvic.ca/~chem213/tutorials/213%20tutorial.htm</u>) under marks and you will find your tutorial booklet grades listed against the last 4 digits of your student number. Please let me know if you find any errors.

From: fawkesk@uvic.ca Sent: Friday, November 1, 2019 4:32 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to tutorial #T5b (Nov 7)

Hi Chem 213 students,

Just a few reminders before your next tutorial:

Your next tutorial (**T5b**) will continue to build you skills of NMR interpretation of a wider variety of nuclei and introduce the topics of magnetic inequivalence and spin-system notation. If you would like to come prepared, it would be a good idea to **read pages C62-70 and try the practice problem before attending**. This tutorial will take close to the full 4 hrs for most students and introduces several complex new topics - all of which have been fully covered in the lectures. *Before leaving the T5b tutorial, please make arrangements with your tutorial instructor to collect your marked T5b booklet prior to the midterm if you wish to use it as a study aid.* 

Quiz #4 is due Friday Nov 8<sup>th</sup> before 1:30 pm in the drop-box. It is based on assignments 5&6 and is available on the lecture website.

There are no tutorials the following week (Nov 11-15). We hope you enjoy your time off over Remembrance Day (Nov 11) and Reading Break (Nov 12-13) and this gives you plenty of time to study for the next midterm. There is a lecture on Friday Nov 15th.

Your second midterm is on **Tuesday Nov. 19<sup>th</sup> in ECS 123 at 1:30 pm**. Details about extra office hours and the next midterm will be coming shortly after Reading Break.

Dave would like me to remind you that there are "extra problems" on the lecture website. The NMR Splitting Patterns (2015) and the <sup>1</sup>H & <sup>13</sup>C Problems (2014 & 2018) are essential preparation for the second midterm. The earlier problems are just as useful, too.

From: fawkesk@uvic.ca Sent: Friday, October 25, 2019 3:57 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to tutorial #T5a (Oct 31)

Hi Chem 213 students,

Your next tutorial (**T5a**) will cover the topics of carbon nmr and 2-dimensional analysis. If you have time, it would be a good idea to **read pages C48-61 and try the practice problems before attending**. This tutorial will take close to the full 4 hours for most students and introduces a lot of new topics.

You will be covering <sup>13</sup>C & DEPT nmr in the lectures at the same time and this will give you a chance to start solving problems right away. You will see 2-dimensional NMR in the tutorials before covering it in the lectures. This is meant to introduce the topic so that Dave can cover more complex molecules in the lecture assuming you already understand the basics from the tutorial.

Once again there are no bubble sheet quizzes due next week, but it would be a good idea to get started on **assignments 5 & 6**. You have covered all the lecture material for assignment 5 and are partway through the material for assignment 6. Quiz #4 (on assignments 5/6) is due Friday Nov 8<sup>th</sup> right before Reading Break, and is now posted on the website.

Remember, Dave's office hours are Wednesdays 11:00 am - 12:30 pm in Ell 314.

#### Happy Halloween!

Yes, you will get candy in the tutorial next week ©

From: fawkesk@uvic.ca Sent: Friday, October 18, 2019 3:15 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to tutorial #T4c (Oct 24)

Hi Chem 213 students,

Next week is very busy for Chem 213. Your first **midterm is on Tuesday Oct 22<sup>nd</sup> at 1:30 pm in ECS 123** (not your regular lecture room) and you have a full tutorial session on Thursday Oct 24<sup>th</sup>.

On Thursday you will hand in **part III of your T4b booklet** along with your original printout from the NMR <u>at the start of class</u>. Remember, you can pick up the spectrum from the file folders outside of Ell 346 and go to one of the campus computing facilities to process the file to see the details on expansion. You do not need to print the expansion or tabulate the results, just decide the unknown structure and circle it on the page of part III molecules. Write your name on the top and staple it to your spectrum, please.

You will be doing **Tutorial 4c** next week. This is a long tutorial! If you have been struggling to complete the work within 4 hours, please come prepared by **reading pages C44-47**. Optional practice problems can be found at the end of these pages and you can check your answers on the website.

If that doesn't wear you out before the end of the week you might want to get started on **Assignment #5**. It will be covered along with assignment #6 on the next quiz which isn't due until Friday Nov 8<sup>th</sup>.

From: fawkesk@uvic.ca Sent: Tuesday, October 15, 2019 3:05 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to MIDTERM #1

The first midterm will cover the introductory topics, all of IR (interpretation and theory), and the introductory nmr (concepts and <sup>1</sup>H nmr basics). This includes pages 1-121 in the lecture portion of the manual, assignments #1-4 (purple pages) and tutorials 1-4a.

You will be supplied with the constants & formulae given on the top of page A2 (yellow data pages). You will NOT get any other information from the yellow data pages (such as IR and NMR values). Obviously this means you will need to memorize a few facts.

Here's a list of the minimum facts you should know:

<u>IR values</u> - all functional groups which occur >1500 cm<sup>-1</sup>

## (ie: OH, NH, COOH, C=C, C=N, CHO, and all the different types of carbonyls (C=O))

Knowledge of the fingerprint region (<1000cm<sup>-1</sup>) should include the various substitution patterns for alkenes and aromatic rings.

## <sup>1</sup>H nmr shifts

- acids, **COOH** (~10-12ppm)
- aldehydes, CHO (~9-10ppm)
- alkenes (~5-7ppm)
- the data in the three boxes at the bottom of **page 101** (alkanes, methyls on an electronegative atom, the effect of adding an additional electronegative atom)
- the data in the box at the top of **page 106** (methyls on a double bond)

## Coupling constants & multiplicity patterns

- the general trend of  ${}^{1}J \gg {}^{2}J \gg {}^{3}J$
- ${}^{3}J_{HH}$  is usually ~7 Hz in alkanes and the patterns produced by these interactions are far more important than the specific values.

## This year's midterm will consist of approximately:

- 16 multiple choice questions, 2 mark each
- 2 mix & match IR questions, 3 marks each
- 2 mix & match NMR questions, 3 marks each
- 1 IR & NMR question with DBE calculations, 6 marks

As Dave has already told you, the best preparation for your midterm is to do the old exams and the extra problems. (These are on the lecture website; all the answer keys are posted too.)

When you get stuck trying to answer the old exam questions you may need some one-on-one help. Dave has office hours in Ell 314:

Friday Oct 18, 9:30-11:30 am Monday Oct 21, 9:30-11:30 am and 1:30-4:30 pm From: fawkesk@uvic.ca Sent: Friday, October 11, 2019 3:37 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to Oct 17 tutorial

Hi Chem 213 students,

Next week will be mostly devoted to review before your first midterm, but will also include a short lab exercise to complete part I of Tutorial #4b. **Please bring your safety glasses & labcoats, and wear long pants & proper shoes**. Small groups of 6-8 students will leave the classroom to prepare an nmr sample in the lab and record the spectrum. This should take about 30-45 minutes and you will work in the classroom after your trip to the lab to complete part I of the booklet.

In preparation please **read the safety information on page C35** in the tutorial appendix, and **watch the T4b video** by the Royal Society of Chemistry for a sneak peek at an nmr, <u>http://www.youtube.com/watch?v=uNM801B9Y84</u>

(copy and paste into your browser if the link isn't working) This instrument is almost exactly the same as the one you will be using.

The spectrum you record next week will be used to complete Part III of the T4b tutorial in the subsequent week, on your own time in the computer lab. Part III will be due at the start of your Oct 24 tutorial.

The rest of the period will be review. You will start by working through the 2016 midterm, checking your answers as you go, and getting assistance from your instructor as needed. You can work at your own pace and it will not be necessary to hand any of this in for marking. From there you can decide what to work on next or leave early if you prefer.

I hope you have a wonderful Thanksgiving long weekend. I'm sorry I couldn't give you the week off from tutorials but I hope the review period will be time well spent as you prepare for your first midterm on Tuesday Oct 22<sup>nd</sup> (1:30 pm in ECS 123). (You will get more details about the midterm next week.)

From: fawkesk@uvic.ca Sent: Friday, October 4, 2019 3:25 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to tutorial #4b (Oct 10)

Hi Chem 213 students,

Well done on getting through a very challenging tutorial this week. I hope you learned a lot and are feeling well prepared to understand the upcoming lectures on the same topic. The tutorial instructors were very impressed with your efforts and I wanted to pass that along.

Next week you will be doing **Tutorial 4b** which is a computer lab-based exercise. You will be **meeting in a computer lab in Clearihue** for the entire period (do not go to your regular classroom). Please note that **no food or drinks** are allowed in the computing facilities.

### Section T01: T4b in CLE A105 at 8:30 am with Tong Section T02: T4b in CLE A105 at 1:30 pm with América Section T03: T4b in CLE A102 at 2:30 pm with Tong

If you would like to prepare for T4b, please read pages C35-43 and try the practice problem in preparation for this tutorial.

You will be learning how to process spectra so that you can independently analyze an unknown after completing a lab exercise on sample acquisition (Oct 17). Watch the T4b video by the Royal Society of Chemistry for a preview of how the nmr works, <u>http://www.youtube.com/watch?v=uNM801B9Y84</u>

Don't forget that **Dave has office hours on Wednesdays from 11:00 - 12:30 in Ell 314** (and by appointment if that doesn't work). You should now be working on assignment #4. The quiz on this assignment is due Friday Oct 11.

From: fawkesk@uvic.ca Sent: Friday, September 27, 2019 11:05 AM To: Chem 213 students and instructors Subject: Chem 213 information prior to tutorial #4a (Oct 3)

Hi Chem 213 students,

Next week we start the NMR tutorials and this is the major topic in Chem 213. Getting off to a good start is essential - we will spend 6 weeks on nmr topics and the information is cumulative - so we need to start with a strong foundation.

I know you haven't covered this in lecture yet, but we plan to introduce this topic in the tutorials so you can more easily follow what Dave is explaining, as he is explaining it. If that makes you uncomfortable, please read pages C23-37 and familiarize yourself with the terminology (chemical shift, coupling constant, integration, tree diagram, etc.). The explanation of how to read an nmr spectrum on pages C24-25 will be especially valuable.

Feeling confident? Test your knowledge by trying the **practice problems on pages C30-34**. The answers are posted on the tutorial website for you to check your own work.

There will be a substantial introductory talk at the beginning of your tutorial to bring everyone up to speed so do not despair if you are feeling lost or don't have time to look at this in advance. We will work through the topic together. Plan to be in the tutorial for 4 hrs - bring coffee, snacks, or whatever you need to get you through...just don't be late, please.

The second bubble sheet quiz is due before 1:30 pm on Friday Oct. 4<sup>th</sup> and is based on assignments 2 & 3. The quizzes are posted as soon as the material has been covered in the lecture and you are free to hand in your answers early. Quiz 2 is on the lecture website now.

Please **check your posted tutorial marks** and let me (or your tutorial instructor) know of any errors. These will be updated frequently on the tutorial website (copy & paste option: https://web.uvic.ca/~chem213/tutorials/protected/213%20marks%20for%20webpage.pdf). **If it looks like you are viewing an old page, please hit refresh on your browser.** The date is shown in the top corner of the marks document.

From: fawkesk@uvic.ca Sent: Friday, September 20, 2019 3:05 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to tutorial #3 (Sept 26)

Hi Chem 213 students,

Just a few reminders before your next tutorial:

1. You will need a pencil, an eraser and a <u>calculator</u> to complete the third tutorial (T3). Please feel free to bring snacks and beverages to the tutorials. You are welcome to take a break and have a snack when you need to recharge. This tutorial typically takes 3-4 h to complete.

2. If you are confused by the theoretical IR concepts it might be a good idea to **read through pages C19-22** in preparation for the tutorial. Practice problems to help you prepare for the tutorial can be found at the bottom of page C22 and the answers are posted on the tutorial webpage. This is completely optional.

3. Today (before midnight) is the **last chance to change your tutorial registration online**. Yes, you can still move to a different section if there is another space that better fits your timetable. Students must register in a section with available space in order to remain in the course, so please do not put yourself on a waitlist today!

4. The marks are now posted on the tutorial website for your first tutorial. The grades are listed against the last 4 digits of your student number and you will need to enter your netlink ID to access this page on the website. Please let me know if you see any errors, or if you would prefer not to have your grade posted on the website.

These will be updated frequently so that you can check your recorded score after your marked tutorial booklet is returned each week. If I don't have a score yet, it shows as a zero but is not calculated in your percentage.

5. Check out the **vintage model of IR motions** the next time you are in the corridor on the third floor of Elliott (lab wing). It is plugged in but you may need to turn on the switch at the back (top left) if the lights aren't already on. My favourite is "ring breathing".

6. Don't forget that **Dave has office hours on Wednesdays from 11:00 - 12:30 in Ell 314** (and by appointment if that doesn't work). You should now be working on assignment #2; then assignment #3 after completing the next tutorial. The quiz on these assignments will be due Friday Oct 4.

From: fawkesk@uvic.ca Sent: Friday, September 13, 2019 3:15 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to tutorial #2 (Sept 19)

Hi Chem 213 students,

Just a few reminders before your next tutorial:

1. Your next tutorial DOES NOT includes a LAB exercise so safety gear is not required. Since everyone has already recorded an IR in Chem 222 or 232, we will skip that part of the tutorial and focus on the interpretation of the spectra.

2. If you wish to prepare (or review) in advance, please **read pages C-13 to C-18** in appendix C and try the practice problems (you can check your answers on the website). Let me know if you are having problems accessing these pages online with your netlink ID.

3. Want to see a reminder of IR instrumentation you have used at UVic in the past (Chem 222 and 232)? Watch the T2 prelab video found on the homepage of the tutorial website. Here's the URL in case the link doesn't work on your system,

https://www.youtube.com/watch?v=DDTIJgIh86E (copy and paste into your browser)

4. There will be plenty of time in your next tutorial to work on assignment #1 if you are interested, so bring your answers if you would like to work on this with your group and your instructor.

There have been a significant number of lost & found manuals this week. Could you <u>please</u> write your name on the front cover and if it gets left behind we can make sure you get it back promptly. I also have a Medium lab coat and a calculator in the lost & found pile so contact me if you think any of these items belong to you.

## The first bubble sheet quiz is due before 1:30 pm on Friday Sept. 20<sup>th</sup>.

Completed bubble sheets (name, student number, etc and your answers) must be in the drop box before the due date. Late bubble sheets will not be marked. The drop box is located at the south end of the lab corridor in Elliott, just past Ell 338, at the top of the stairs beside the microwave oven.

Blue bubble sheets are available in front of the drop box. Please do not take extras, these will just get crinkled and be unreadable if you hold onto them all term.

Complete assignment #1 (purple pages 13-14) and then it will only take you a few minutes to answer the multiple choice quiz questions once these are posted on the lecture website this weekend. Dave has office hours on Wednesdays from 11:00 am - 12:30 pm in Ell 314 if you need some help.

Cheers,

Kelli

From: fawkesk@uvic.ca Sent: Friday, September 6, 2019 4:45 PM To: Chem 213 students and instructors Subject: Chem 213 information prior to first tutorial (Sept 12)

Hi Chem 213 students,

Each Friday you will get an email from me with some reminders about what is happening in the upcoming week for Chem 213. Some of this may be new information if we have had to make a change to the original plans, but much of it will be gentle reminders of information available in the manual or on the website, <a href="https://web.uvic.ca/~chem213/chem213.htm">https://web.uvic.ca/~chem213/chem213.htm</a>. The following is an edited repeat of the email you received last week.

Please be aware that the Chem 213 <u>tutorials</u> start in the second week of the term, Thursday September 12<sup>th</sup>. You will need to bring:

1. the Chem 213 Manual, 2017 or 2018 Fall edition\* (distributed in first week of lectures)

- 2. a calculator, pencil, and eraser
- 3. a lab coat and safety glasses (lab notebooks are not needed)

The tutorial information can be found on the website

(https://web.uvic.ca/~chem213/tutorials/213%20tutorial.htm).

You will need to enter your netlink ID and password to access the "Tutorial Information (Appendix C)" box. Let me know if you are having trouble accessing this information.

Please **read pages C-1 to C-12** in appendix C and try the practice problems to help you prepare for the tutorials. You can check your answers on the website. Want a sneak peek at one of the activities from the first tutorial? Watch the **T1 prelab video** on the tutorial website.

A record of class emails is kept on the tutorial website in case you think you have missed anything. If you have any questions or concerns please contact me by email.

Cheers,

Kelli

From: fawkesk@uvic.ca Sent: Friday, August 30, 2019 8:40 AM To: Chem 213 students and instructors Subject: Chem 213 information prior to first tutorial (Sept 12)

Chem 213 students,

Welcome to Chem 213, Practical Spectroscopy. Please be aware that the Chem 213 <u>tutorials</u> start in the second week of the term, Thursday September 12<sup>th</sup>. (Lectures start Wednesday Sept. 4<sup>th</sup> in ELL 162.)

To claim your space in the course, you must attend the first tutorial. If you are unable to attend, please email me right away.

If you are waiting for a space in a tutorial section please note that students on the waitlists will NOT be able to attend and complete the first tutorial. Due to limited space, you must be registered to attend.

You will need to bring:

- 1. the Chem 213 Manual, 2017 or 2018 Fall edition\* (available at the first lecture)
- 2. a calculator, pencil, and eraser
- 3. a lab coat and safety glasses (lab notebooks are not needed)

The tutorial information can be found on the website (https://web.uvic.ca/~chem213/tutorials/213%20tutorial.htm).

You will need to enter your netlink ID and password to access the "Tutorial Information (Appendix C)" box. Let me know if you are having trouble accessing this information.

This will allow you to **read pages C-1 to C-12** in appendix C and try the practice problems to help you prepare for the tutorials. You can check your answers on the website. Want a sneak peek at one of the activities from the first tutorial? Watch the **T1 prelab video** on the tutorial website.

If you want to get a head-start and your netlink ID is not working, you can access the first few pages of the tutorial information using the quick link to pages C1-C12 under the 'first class' heading below the coloured boxes of the tutorial homepage.

I will send updates by email every Friday afternoon so you know what to expect in the upcoming tutorials each week. A record of those emails is kept on the tutorial website in case you think you have missed anything.

If you have any questions or concerns please contact me by email.

\*Please feel free to use the 2016, 2017 or 2018 version. The changes have been very minor. The tutorial appendix is printed in the 2018 manual due to student requests, but a digital copy is also available on the website in case you are using an earlier version without those pages.

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No class emails for 2019 yet. The first will be coming in early September.