

Pre-Recorded IGCSE Chemistry Course Information

(Updated January 24)

CanDoChem courses prepare students to take Edexcel IGCSE Chemistry - 4CH1

What do the courses include?

- The courses are broken down into 66 suggested lessons.
- The standard lessons are designed to be approximately 1 hour interactive learning sessions, with workbook style notes to complete during the session and a lesson video. During the lesson, students are instructed to pause the video and try activities before being given an explanation of the answers. Please note, there will be some variation in lesson lengths to allow for sensible topic splits and of course individuals will work through activities at different paces.
- Each of the standard lessons comes with self-marked follow up work, which usually
 takes the form of worksheet style questions and/or exam questions to consolidate
 learning. This is an essential part of the course to enable students to develop
 understanding and embed learning and students should allow at least an hour each
 week for review of their learning and completion of activities.
- There are over 35 electronic quizzes spread throughout the course to provide regular understanding checks on course content and highlight where more work might be needed.
- Each lesson also provides details of the relevant text book pages and end of chapter questions to provide opportunities for further practice.
- There are 8 revision and topic test lessons, which included revision resources. There are Quizlet sets for each sub-topic, which help with learning definitions and the key terminology required for more recall-based answers. A set of practice exam questions is also provided to help students familiarise themselves with typical exam questions and highlight where more revision may be needed before they take the topic test. The topic tests are based on exam questions and are designed to be around an hour in length.
- Core practical footage is included within the lessons, along with follow up questions and exemplar data to analyse, where appropriate, to build the essential practical understanding. (Practical based questions make up at least 15% of the marks in the final exams.)



Overview of course structure

- Exams are offered in November and May / June.
- The course is self-paced, but if choosing to a Silver or Gold course package, I can offer payment by termly instalment please contact me to discuss.
- If you want more accountability or guidance, why not upgrade the standard self-paced course to a Silver or Gold course package.
- Students take 2 exam papers For Chemistry IGCSE. Paper 1 is in common with students taking Combined Science (2 IGCSE grades awarded across all 3 Sciences). Paper 2 covers the whole specification including the extra, Chemistry only, content. The Paper 2 only content very much builds on the Paper 1 content and tends to be slightly more in-depth and challenging. The Paper 2 only content is bolded in the specification. Please see the specification for further detail.
- CanDoChem IGCSE Chemistry courses are structured so that I teach predominantly Paper 1 content first. This enables a breadth of knowledge to be built and is sensible in terms of allowing exam preparation to begin earlier for Paper 1. I also ensure that we revisit more difficult skills in multiple places, to help students become more confident in their use of them. I then teach the extra Paper 2 content at the end of the course, building on earlier Paper 1 content and encouraging review of it.
- Guidance is provided on structuring exam revision, but this is inevitably a very individual process. Feedback from mock exams, can help shape a revision plan.



Guide to teaching order

Studying IGCSE Chemistry over 2-years

The suggested timings below will allow the course to be studied over 5 terms – beginning in September and completing it by Easter in the second year. This works well for aiming at a summer exam sitting. However, if a longer revision period / slightly more relaxed timings are required, the next exam sitting is November.

Term	Two-year IGCSE
Autumn year 1 Half Term 1	Principles of Chemistry: fundamentals, states of matter, compounds and mixtures.
Autumn year 1 Half Term 2	Principles of Chemistry: atomic structure, Periodic Table, structure and bonding.
Spring year 1 Half Term 1	Organic Chemistry: introduction, crude oil, alkanes, alkenes.
Spring year 1 Half Term 2	Organic Chemistry: addition polymers. Inorganic Chemistry: Groups 1 and 7, Chemistry of the atmosphere
Summer year 1 Half Term 1	Inorganic Chemistry: , acids, bases and salts, reactivity series.
Summer year 1 Half Term 2	Inorganic Chemistry: chemical tests. Principles of Chemistry: moles calculations.
Autumn year 2 Half Term 1	Principles of Chemistry: moles calculations.
Autumn year 2 Half Term 2	Physical Chemistry: energetics, rates of reaction.
Spring year 2 Half Term 1	Paper 2 top up: Part 1.
Spring year 2 Half Term 2	Paper 2 top up: Part 2.
Summer year 2 Half Term 1	Revision.



Studying IGCSE Chemistry over 1-year

The suggested timings below will allow the course to be studied over 2 terms – beginning in September and completing it by Easter in the second year. This is an intensive option, but does allow study to be undertaken with exams sat within an academic year.

Term	Two-year IGCSE
Autumn year 1 Half Term 1	Principles of Chemistry: fundamentals, states of matter, compounds and mixtures. Principles of Chemistry: atomic structure, Periodic Table, structure and bonding.
Autumn year 1 Half Term 2	Organic Chemistry: introduction, crude oil, alkanes, alkenes and addition polymers. Inorganic Chemistry: Groups 1 and 7, chemistry of the atmosphere
Spring year 1 Half Term 1	Inorganic Chemistry: acids, bases and salts, reactivity series, chemical tests. Principles of Chemistry: moles calculations.
Spring year 1 Half Term 2	Physical Chemistry: energetics, rates of reaction. Paper 2 top up.
Summer year 1 Half Term 1	Revision



Why choose a CanDoChem course?

My vision at CanDoChem is to enable all students to access a top-quality Chemistry education, that will engage and enthuse them and help them to realise their potential. Chemistry is a conceptually challenging subject, where specialist teaching makes all the difference in terms of both helping students to flourish and really understand the subject. I am equally passionate about both teaching and Chemistry, and the progress of every student genuinely matters to me. My courses are taught and resourced in such a way to ensure that students with SEND are set up for success and the excellent teaching practices benefit all learners.

Much of the assessment in both IGCSE and (I)A Level Chemistry involves application of knowledge rather than rote learning. This requires building of skills and regular reinforcement of knowledge, through carefully thought-out schemes of learning and well-honed explanations with tips and tricks to help with more complex ideas. CanDoChem courses are aimed at students who are keen to engage with conceptually challenging content, which is taught in an engaging and interactive way.

Unlike many courses, mine includes footage of all the core practicals (and more) to help build an in-depth understanding of this side of the course, which is worth at least 15% of the marks in the final exams. I recorded all of the practicals especially for my courses, so the commentary is specifically geared towards required explanations, using appropriate terminology. This helps students gain a much more comprehensive understanding, than from just reading about the practicals. Also included are follow up questions, linked exam questions and exemplar data to analyse, where appropriate, to build all the necessary skills.

The course resources are extensive and carefully crafted to build the skills needed and enable practice of explanations. Becoming good at application of knowledge, which is key for success in Chemistry examinations, requires lots of question practice, which is where the range and variety of resources provided come into their own, with worksheets, sets of exam questions, electronic quizzes and more interactive activities. There is also the rote learning element of the course, in terms of definitions. The detailed Quizlet sets for each topic help support this. As one student following a Pre-Recorded course recently wrote to me, "I've found the Quizlets you made are amazing thank you so much. They have helped me with my understanding and confidence."

I am a former Head of Chemistry with over fifteen years of teaching experience. I spent the first twelve years teaching in UK schools and for the last three years I have been an independent online Chemistry educator, working with many home educated students.

Whilst in the classroom, I taught the Edexcel IGCSE Chemistry course for six years, at one of the UK's top independent schools, so I know the specification and exam style inside out. As



an extremely experienced A Level Chemistry teacher, I ensure that excellent foundations are set in place for those who wish to go on to study Chemistry at a higher level. This is really important in terms of helping to smooth what can otherwise be a challenging transition from IGCSE to A Level Chemistry. I am also an examiner, so have a focus on teaching exam technique, which I embed in the IGCSE course from the start.

I have a PhD in Chemistry from the University of Cambridge, so am (mostly) able to answer the challenging questions that my students like to throw at me! I also have a PGCE and a Masters in Education, from Cambridge. My educational expertise means that I am a very reflective teacher, who excels in simplifying concepts and building understanding in a step wise manner, which helps all students.

Course Pre-Requisites

It is not essential to study KS3 Chemistry prior to taking IGCSE Chemistry, as I do cover all concepts needed. Those students who have not studied Chemistry previously, will need to be prepared to do extra work between lessons though, as they will have more new ideas to take on board, which will make it a steeper learning curve. If you think a KS3 Chemistry specific course would be helpful in terms of setting your child up for their IGCSE Chemistry studies, why not try my KS3 Pre-Recorded course:

https://courses.candochem.com/courses/ks3-chemistry

Students should be working towards (I)GCSE Maths alongside their Chemistry studies. All (I)GCSE Chemistry specifications have become more mathematical in recent years and at least 20% of the marks in the current exams require use of mathematical skills. **Students should not enrol in a course aiming at them sitting their IGCSE Chemistry exams substantially ahead of (I)GCSE Maths**. If students are not studying at a similar level in their maths, they will struggle with the more mathematical aspects of the Chemistry course. Given the nature of Chemistry, where we build on earlier knowledge, they do need to understand work as we cover it to enable them to then access later ideas, otherwise they end up out of their depth, which is a situation that I like to avoid for everyone's sake!

I have designed a teaching order for the 2-year Chemistry IGCSE course, which leaves some of the more complex topics until later in the course when students have built confidence and are that bit more mature. This has always been standard practice in the schools in which I have taught and works really well. So please don't worry unduly about the emphasis on the maths side of the course, but I do want to avoid the situation where students struggle because they are aiming at taking their Maths exams a year after their Chemistry exams.



Course Upgrades

Silver IGCSE Course Package

In addition to everything included within the standard course, this option includes marking and feedback on the eight topic tests and two mock exam papers, as well as access to support either via email or twice weekly drop-in help sessions in term time.

Test marking and feedback helps to provide an accurate picture of student performance and can be really helpful in terms of guiding further work. It can be difficult for students to know how to interpret mark schemes - especially at the start of their learning journeys. As an examiner, I am adept at appropriate marking, which is in line with that of the exams.

For mock exams, I provide up to date papers when students are ready to sit them. They can take them whenever they feel ready in their own time. Alternatively, I run live mock sessions over Zoom — in February / March for Paper 1 and April for Paper 2. This helps to provide a more formal experience, which is a good stepping stone towards the actual exams.

The ability to access support either via email or the drop-in help sessions can make all the difference to the progress of students following my pre-recorded courses. They are able to access individual support to deal with any problems or ask questions as they occur, rather than issues building up and hindering further progress. The drop-in help sessions run via Zoom. Timings of help sessions are released by the start of each academic year.

Marking of topic tests is carried out electronically via Google Classroom. This requires students to scan their tests and upload them as a single pdf file. Further guidance is provided on how to do this e.g. through mobile phone apps. I aim to provide marking and feedback within a week as the norm in term time, although it is often faster. Please do allow longer during holiday periods.

Cost: £350 total (including the pre-recorded course cost)

Please contact me to discuss a payment plan if you would like to pay termly.

Link to purchase course outright:

https://courses.candochem.com/courses/self-paced-igcse-chemistry-marking
The first lesson is available as a free preview.



Gold IGCSE Course Package

In addition to everything included in the standard course and the marking and feedback of topic tests and mock exams, students on the gold package also have a weekly tuition in term time to consolidate their understanding of the lesson content. For those students wishing to continue studying during holiday periods, I am often able to facilitate tuitions on a more adhoc basis.

This package allows students to work through the pre-recorded lessons at a time and pace that suits them. In the tuitions we can then focus on clarifying and deepening understanding and applying learning to answer exam questions. These sessions are bespoke though, meaning that I adapt the content to suit individual student's learning needs. Some students benefit from the opportunity to address areas of difficulties encountered in either the lesson or homework, while for others it is appropriate to extend their learning beyond the confines of the IGCSE specification. Regardless of students' individual abilities, the tuition helps to bring accountability to their learning, builds their confidence and develops their understanding and their ability to apply it to answer exam questions. The individual session helps me to stretch and challenge each individual student and helps to maximise their progress and attainment.

For students following 2-year course, I offer a weekly thirty minute tuition, usually consolidating the content of one lesson per tuition. For those students wanting to follow the course over 1-year, the tuition is an hour session to consolidate the content from two lessons as the norm.

Cost £32.50 per half hour tuition (including the pre-recorded course access and marking)



Text Book Recommendation

I recommend buying the text book below. Whilst not essential, it is a very good source of extra information and practice questions, which I reference within the course lessons.

Pearson Edexcel International GCSE (9-1) Chemistry Student Book – Jim Clark (June 2017)



Course Reviews

Pre-Recorded Course

"CanDoChem is the best provider of science classes for home educators out there (and I've sampled quite a few). New concepts are introduced gradually and with plenty of reinforcement and encouragement. Class hand-outs have just the right amount of information and are great for revision. A lot of work has clearly gone into delivering a logically planned course, and it really shows!"

J.R., April 2022

"Learning with Kate is an absolute pleasure and the right solution for my daughter. Her video lessons are calm, easy to understand, interesting, very well structured and the notes/handouts and homework very clear and easy to follow."

G.WG, April 2022



Pre-Recorded Course with upgrades

"The quality of the teaching is fantastic. The sessions provided go above and beyond when it comes to detail and the smaller class size means that each child gets more attention than they would in a classic school environment. Kate always includes details and worksheets that help every student understand the content. The feedback is detailed and Kate is always quick on the trigger when it comes to answering any questions and queries. The resources provided gives students the opportunity to reinforce and practice their skills in Chemistry with extra drop-in sessions proved if further support is needed. Overall I would strongly recommend CanDoChem to any parents considering this courses. I would like to offer my thanks to Kate for delivering an excellent learning experience."

J.J., February 2023

"Kate is amazing, she explains things thoroughly and makes sure I have a clear understanding of the topic, she always provides constructive feedback and will help with any problems, I feel confident to email her with any questions or problems and I look forward to my Chemistry lesson."

Student, February 2023

"It's really useful and the way it's done helps make the subject easier. I also think that it's pretty easy to revise past topics if you need to because of all the material and notes you are given."

Student, February 2023



Comparison of IGCSE courses

Included	Pre-	Silver	Gold
	recorded	package	package
Pre-recorded lessons	✓	✓	✓
Workbook style notes	✓	✓	✓
Practical videos	✓	✓	✓
Follow up work (self-marked)	✓	✓	✓
Electronic quizzes	✓	✓	✓
Topic tests	✓	✓	✓
Quizlet access	✓	✓	✓
Marking of tests & mock exams		✓	✓
Drop-in help sessions / email help		✓	√
Weekly individual tuition			✓

Course costs

Course / Package	Cost	
Pre-recorded	£200 total	
Silver package	£350 total	
Gold package	£32.50 per week (term time only)	
Live Classes	£17.50 per week (term time only)	

Please contact me to arrange a payment plan for any of the course options.

Please note that I endeavour to provide courses to support all budgets and levels of support. My courses do cost more than many home education courses, but I bring a wealth of experience and expertise to them and I believe that the level of detail in the course and the quality of the resources is pretty unique in a home education course. I am continually updating and improving my resources, to help make them even better. Producing the accompanying resources has been (and still is) a mammoth task, including extensive resource writing, hiring labs and filming all the practicals, to video production and editing. There are also subscriptions to take into account, which increase the quality and interactivity of the courses. I also spend a lot of time liaising with families and giving feedback / advice for those students who follow courses with live classes or tuitions.

Bursary scheme

In order to ensure that all students are able to access Chemistry teaching, in these difficult financial times, I am pleased to be able to offer a bursary scheme for my standard pre-recorded courses, offering fully funded places. If you have a child who would love to study Chemistry, but you cannot afford the cost of the course, then please complete the electronic application form: https://forms.gle/1HbQxRfWFCDaUe3r6



Further information / contact details

Should you have any questions, or want any further information then please do not hesitate to contact me on candochem@gmail.com

It matters to me that we find the best fit for your child, so am always happy to offer further advice to help you make the right decision.

Terms and Conditions

- The IGCSE Courses prepare students to take Pearson Edexcel IGCSE Chemistry (4CH1).
- Pre-recorded Courses include a 1 week cooling off period after the start of the course, during which time I will provide a full refund if you do not wish to continue with the course. After that time, courses are non-refundable.
- Students following any course with a termly payment plan will lose access to the course if they do not maintain the scheduled course payments.
- Students are given 2-years access as standard for pre-recorded courses, but this can be extended if needed just drop me an email.
- If choosing to follow any course with a payment plan, fees are due termly in advance, just before the start of each term. This can be paid via Stripe or bank transfer, with details on the invoice. An email reminder is sent if an invoice is not paid by the due date. A £10 admin fee will be added to the bill of any families requiring a second reminder.
- Parents are responsible for booking of exams for their child, although I am more than
 happy to advise and support as necessary, particularly wth reagrds to evidence for
 access arrangement, such as extra time for students with SEND. As a Learning Partner
 with Tutors and Exams, parents are able to access a 15% discount on exam entry fees
 at the time of booking should you decide to enter through them. You will need to
 contact me for the code should you wish to take advantage of this.
- Course resources must not be shared with other families. Please note that I do offer a bursary scheme for my Pre-Recorded Courses if a family cannot afford the course fees.



CanDoChem Privacy Policy

My contact details

Name: Kate Nickson, CanDoChem Ltd.

E-mail: candochem@gmail.com

The type of personal information I collect

I currently collect and process the following information:

- · Name, email addresses and phone numbers for parent(s) / guardian(s)
- Names and ages of students
- · Email addresses of students (when supplied)
- · Student SEND / relevant medical information
- Any other relevant background information about students provided
- · Copies of student work
- · Student achievement data e.g. topic test scores, mock results

How I get the personal information and why I have it

Most of the personal information I process is provided to me directly by you for one of the following reasons:

- To allow me to make contact with you to keep you updated on student progress.
- To enable me to teach your child effectively, with knowledge of anything that is likely to impact on how they learn, or specific difficulties that they may face.
- To enable students to log onto Google Classroom and my course site to access learning resources.
- From student work in classes / tuitions on the online whiteboard to enable me to help them practice application of knowledge to answer questions, build understanding, as well as assessing where further work may be needed.
- · From student work submitted on Google Classroom in order for me to assess their attainment and provide feedback.



I use the information that you have given me in order to:

- Provide access to teaching resources.
- · Plan effective teaching strategies.
- · Assess student understanding and provide feedback on current attainment and targets to work on in order to improve understanding.
- · Liaise with parents / guardians.

I may share this information with exam centres if needed for Access Arrangement applications or for references / predicted grades for school / college / UCAS applications. I will only do this if you have specifically asked me to do so and will never share any information that I hold without your knowledge and permission.

Under the UK General Data Protection Regulation (UK GDPR), the lawful bases I rely on for processing this information are:

- (a) Your consent. You are able to remove your consent at any time. You can do this by contacting candochem@gmail.com
- (b) I have a contractual obligation.
- (c) I have a legitimate interest.

How I store your personal information

Your information is securely stored.

I keep all information provided, including copies of student work and progress data until exam results are published. Within 1 month of this, giving me time to check that the information is no longer needed e.g. for any students wishing to do resits, I will then dispose of your information by deleting any copies of data held on my computer system e.g. mark books and contact details. I also delete the Google Classroom folders, copies of whiteboards and Classkick rostas, which store copies of student work. If students are not working towards an exam, then I will delete all data, as listed above, within 1 month of them ceasing tuition.



Your data protection rights

Under data protection law, you have rights including:

Your right of access - You have the right to ask me for copies of your personal information.

Your right to rectification - You have the right to ask me to rectify personal information you think is inaccurate. You also have the right to ask me to complete information you think is incomplete.

Your right to erasure - You have the right to ask me to erase your personal information in certain circumstances.

Your right to restriction of processing - You have the right to ask me to restrict the processing of your personal information in certain circumstances.

Your right to object to processing - You have the right to object to the processing of your personal information in certain circumstances.

Your right to data portability - You have the right to ask that I transfer the personal information you gave us to another organisation, or to you, in certain circumstances.

You are not required to pay any charge for exercising your rights. If you make a request, I have one month to respond to you.

Please contact me at candochem@gmail.com if you wish to make a request.

How to complain

If you have any concerns about my use of your personal information, you can make a complaint to me at candochem@gmail.com.

You can also complain to the ICO if you are unhappy with how I have used your data.

The ICO's address:

Information Commissioner's Office Wycliffe House Water Lane Wilmslow Cheshire SK9 5AF

Helpline number: 0303 123 1113

ICO website: https://www.ico.org.uk