RESPONSE TO STUDENT CONSULTATION ON EXPERIENCES OF STUDYING S390 PROJECT MODULE

SUMMARY

Students who had, or were about to, study S390 were asked a series of six questions about their experiences or preparations for the module. This consultation took place between August 23rd and September 12th, 2021, on the Life, Health and Chemical Science (LHCS) Board of Studies Student Consultation Forum.

What was being asked? Six different questions were asked, we have grouped each question with its resulting headline messages and actions below.

Who has considered the feedback? The module team responded to many of the posts directly on the forum. Below is a selection of responses collated by Dr Jon Golding (chair S390) and Dr Janette Wallace (co-chair S390 rewrite).

What happens next? For each question, many of the points raised will feed into the module rewrite for February 2023 (23B). Your responses to this consultation will help us to improve the module.

Question 1: Expectations of students planning to study S390 in the future. 'What will you do to prepare for the module?' 'What format/type of project would you like to be able to complete? E.g. literature based, laboratory based, educational, field-based or data-based?', 'What sort of support would you expect to receive, e.g. one to one tutor support, peer support, support from the module team?' and 'What skills would you expect to develop through completing your project?'

Headline messages and actions:
- Having sight of module website and information in advance
- Variety of ideas of sorts of projects to be completed
- Personal tutor support wanted
- Peer support welcomed
- Many different skills to be developed from both literature and data analysis project types

FULL RESPONSE Q1

You said	OU response	Next steps, if appropriate
I am hoping to get a glance of the module website before the start date to prepare me for what the module holds.	The module website usually opens a few weeks before the module start date. At that stage, you'll have access to all the module materials and can use the forums to communicate with the student buddies and the module team.	We will ensure the module website is opened early and that this continues when the module is rewritten for February 2023 (23B).
It would be good to get some idea of what kind of theme our final project will need to cover, so that we can start to think about it early.	It's a great idea to think about the themes and project ideas in advance of starting. We have information videos for some strands on the science site. Website: Science (open.ac.uk).	We could ensure there are information videos for all strands.
I am hoping to undertake a field-based project and collect my own data. I'm…hoping it remains literature based for health scientists. I was unable to complete any field work in S209 or S309 which I feel would have been most beneficial to me and my style of learning. I have both a practical and literature review project outlined for each area I'm interested in.	Depending on the strand you register on there are different opportunities to select field, data analysis or a literature project. For some strands there is optionality but for other strands only one type of project is available. For example, students studying R58 BSc Biology are required to complete a field or data analysis project to comply with Royal Society of Biology accreditation requirements.	We are considering project types as part of the rewrite and discussing the types of support required for different types of project. We will make it clear in advance the options for each strand from February 2023 (23B).

I would expect a "personal tutor" within the overarching area of my project - microbiology, immunology, genetics, epidemiology etc, but that the personal tutor would have a limited number of students so that they can help each as necessary.	We currently have a 1:10 tutor student ratio. Each tutor has scientific knowledge and all tutors are specialists in undertaking undergraduate project work and supervising such studies. The module team support the tutors.	We plan to continue with the 1:10 ratio both in the next presentation and also in the rewrite of the module.
I would expect there to be peer support forums to help when wanting an answer to a common question and hints and tips etc.	We currently have a student buddies forum so peer support is offered there. Individual tutors might also offer tutorials where peer-to-peer support in encompassed.	We plan to continue with the student buddies forum. We are considering how to incorporate more peer-to-peer support as part of the module rewrite.
I would expect to develop skills of (i) tracking down relevant articles, (ii) understanding and evaluating complex writing, (iii) summarising difficult concepts clearly and succinctly, and (iv) using reference management tools. I would also hope to be learning something new and interesting about the chosen topic! I'm hoping there will be a range of skills which we can choose to take time to improve on which will be specific to our areas of interest, such as types of surveys, data collection on different types of data, and of course some revision on stats and data analysis, like a selection of refresher tutorials which we can choose from.	At the beginning of the module students complete a personal skills audit, identifying what skills they each require and how and when they will develop them. There is support for skills development including tutorials, tutor support, the library and module resources. Additional support in the form of tutorials and resources are available for students doing a data analysis project.	The skills audit is a great tool for students to understand and develop their skills We need to review our tuition and resources to support different types of project. We are currently considering StatsCloud for example for students who are analysing data for their project.

Question 2: For those who have/are studying S390: How prepared were you? 'When you registered on S390 did you understand what the module would entail?', 'At the start of the module how prepared did you feel?', 'Did you do anything to prepare in the months preceding module start? (follow up if needed: for example, access the module prep-site, attend a module information session, participate in journal clubs, read scientific papers, work on improving your skills?)' 'What advice would you give a student about to start S390?'

Headline messages and actions:
- Many students felt prepared having seen briefings, read material or been on the module website in advance of it opening.
- To prepare students suggested students attend tutorials, meet with tutor, read forums
- Contingency plans are useful
- Front loaded module

FULL RESPONSE Q2

You said	OU response	Next steps, if appropriate
At the start of the module, I felt extremely well prepared, but only because I have done a lot of preliminary work to get ready for the module.	It is heartening to see that most students who responded had some idea of what the module entailed from preparing, watching briefings or hearing about the module from others.	Continue to communicate effectively with students about the module. Include comms from the start of a qualification.
I knew I would be expected to write up a large project, but with it being a chemistry module (I did SXM390) I expected some form of practical work as there has not been any opportunity to do so in the past 6 years of study. So I was a little shocked (maybe not the right word but its the best I can find) when it started to find that I would be researching	Depending on the strand the option for a literature view or field/data analysis project varies.	We need to communicate clearly what sorts of projects are available for all strand types. We are considering the types of projects each student completes on each strand

research papers, not doing an experiment myself.		and will make this clear in advance.
I mostly read a few scientific papers and magazines for some inspiration, and I recapped some of the material from previous modules that I thought might be relevant to scientific report reading/writing. I did watch the module prep video and explored some of the library resources. Start as early as possible to think about your research area, your hypotheses and what kind of experiments you could conduct, where you will perform these experiments, whose consent is needed and what kind of equipment you will need. The better you are prepared, the easier the module, …	We were heartened to see students accessing different resources to prepare for the module. This included the module site (in advance of module start), library resources and tutorials, reading magazines and scientific articles and reviewing past modules for ideas. And considering what is required for all types of project.	We will continue to support the prep site and opening the module website in advance of module start. Need to ensure students are aware/ prepared in advance by communicating with them. We could also consider additional support at the start of the module from tutors/module team/student buddies.
Re; your tutor... Make a list of questions that you want answered prior to the phone call. It saves a lot of time and also helps guide your thinking with the project.	Tutor student ratio is 1:10 on this module which allows your tutor lots of time for 1-2-1 discussion. Being prepared for this discussion will support you on the module.	Continue with 1:10 tutor student ratio. We are considering guidance on how to prepare for one-to-one sessions and what to expect from your tutor.
To students about to take this module I would say research something you are passionate about If you are starting this project and you can do it on a subject that fascinates you, I believe this is half the battle. you should enjoy it and then really get stuck in	Many students enjoy S390 because they choose a topic, they are interested in. This keeps students interested over the full 8 months and is recommended.	We will continue to review topic and project choices to support students to study something they have an interest in.
I would also recommend getting to grips with software, such as Zotero, which can be used to save and organise relevant papers.	Being organised with your references is a key skill for S390. We would agree that use of a free reference's management tool is a must.	
Have a plan B ready in case of unforeseen circumstances Allow some contingency time. Life happens.	As part of the module students are asked to design their own project plan (like a personalised study planner). Tutors encourage students to include contingency time even though this can feel a bit strange at first.	The project plan will continue to be used in the module. And a similar task will be designed as part of the module rewrite.
Download all available documents as soon as the module website opens and read everything carefully, project guide, strand guide..... ALL of them.	The module is structured in such a way that there are a lot of guides and documents to read and review.	For the rewrite we are considering how to present these guides for ease, timing and accessibility.
Be aware of the time demand. The module is front-loaded, meaning the first month building up to TMA01 requires substantially more time..	The nature of planning (project plan, skills audit) and choosing a topic is key at the start of the module. This means there can be a lot to do at the start	By continuing to open the module website in advance of module start students can get a feel for the module and begin to prepare. We are considering the front loading of the module and how to decrease this as part of the module rewrite.
Attend all tutorials, or watch the recordings, and accept your tutor's offers for 1:1 chats, even if you think there's nothing to discuss. Keep an eye on the forums, especially the module noticeboard, as people post some really helpful links and documents.	Using the tuition support as part of the module is recommended by the module team. The tuition strategy is tailored to your strand and project type. There are lots of forums with some useful advice and the student buddy forum is really useful	The tuition strategy will not change for the next presentations. It will be reviewed for the module rewrite.

Don't panic! There is a lot of reading and so much information to absorb, it is easy to become overwhelmed. The timeline, at first, looks daunting but being organised and preparing a timetable of study really helps. It does get easier!	The module can seem daunting at first but there is lots of support from your tutor, the module team and S390 student buddies.	
Make full use of the OU Library and its resources. They offer training sessions on some key skills - some of which you might be able to talk about as part of your Skills audit.	The OU library is a really useful resource for students on S390. There are many tutorials on offer	

Question 3: Students who had/were currently studying were asked what worked well. 'Please tell us about what you enjoyed most, what worked well, and your main achievements.'

Headline messages and actions:
- Overall sense of achievement
- Skill development
- Tutor student relationship
- Learning about their chosen topic in depth
- Gaining a degree

FULL RESPONSE Q3

You said	OU response	Next steps, if appropriate
Reflecting on this module now, I feel the highest sense of accomplishment and achievement than any other module. It gave me a lot of confidence and an opportunity to really build on my research skills, and independent study. Most of all, completing the project gave me a new confidence in my abilities which I didn't have before. Obstacles are no longer obstacles but opportunities for other possibilities.	S390 as the capstone module brings together all of our student's skills and knowledge resulting in further independent learning. The production of final report (whether literature or data analysis) is satisfying for students and their tutors (and the module team).	
The guidance that OU gave. My tutors, the tutorials and the OU written materials were top notch, I was seriously impressed.		
Learning an entirely new subject that I had no background in - and going from not even understanding the basics to feeling to being able to write non-stop about it. Getting my teeth stuck into science that I enjoy.	S390 allows students to choose topics that are current and interesting to students. This allows students to understand their science and enjoy studying it in depth.	Topic choice and project types is being considered for the module rewrite.
I thoroughly enjoyed the practical aspect of my project but my research was really interesting.	Practical/data analysis projects are possible on a number of strands	For the module rewrite we are considering the types of project for each strand.
I enjoyed the module-wide forum (all S390 variants); it was a great community there and fun to meet again students I'd studied with on previous modules who were doing a different S390 strand.	Supporting students networking and community building can be difficult on S390 when each student is studying their own topic. It is great to see that forums create these opportunities	
I enjoyed most the great working relationship with my tutor, whose support and constructive feedback was extremely helpful throughout the module.	The tutor student relationship is key to the OU module of teaching and learning. S390 takes pride in offering 1-2-1 support via 1:10 tutor student ratios	

The skills that I had identified as being on the low end of the scale have significantly improved throughout the module, especially my scientific writing skills. This has already led to progress in my career where I could take on additional responsibilities normally denied to lab technicians, e.g., drafting patent applications. I enjoyed learning new project management skills and still use these tools today.	Skill development is key to the module with students completing a skills audit at the start and planning how they develop their skills. It's useful to see skill development taken forward outside of the OU.	The module team is considering the skills being development for the rewrite especially in relation to employability of students.
I got through the degree! I know results day is some time away, but I am thrilled to have got through. This was my final module and I have now completed my degree.	Studying S390 at the end of your qualification is recommended so that your skills and knowledge already developed are used in this final module. Enjoy your graduations – some of the Associate Lecturers (tutors) or module team may be in attendance so do look out for us.	

Question 4: Students who had studied S390 were asked whether they experienced any challenges in studying that module. Specifically, "anything that worked less well, what was most challenging, and if you have any suggestions for improvements to the module".

Headline messages and actions:
  - Scattered information
  - Deciding what to research
  - Module start timing
  - How to do data analysis and fieldwork
  - Tutors are not subject experts
  - Unable to discuss the science with other students

FULL RESPONSE Q4

You said	OU response	Next steps, if appropriate
There are so many different guides on the module website! I wonder if any could be amalgamated? Maybe put the assessment guide into the project guide? Suggest one guide per strand that includes FAQs and Assessment in the order they are needed throughout the module.	Excellent suggestion but would need careful planning to make sure students don't miss any assessment items. For this reason, they're currently placed all together in a single document. We also like students to read the entire Project Guide before starting project work, so they don't misunderstand an important point or task.	The module is currently being reimagined and rewritten for February 2023 (23B). The student consultation is an important part of this process, and your ideas will feed into improvements.
The bit I struggled with was deciding on a research question, as I've said in other posts, everything was so interesting, it was very hard to narrow it down. I felt I made my decision very close to TMA01 out of necessity and not on something I was immediately drawn to although I did enjoy it in the end.	It's always a good idea to come into the module with a few ideas. Several students use the forums early on to discuss ideas. It's also important to read some general reviews on the topic area you want to investigate, to help identify any problem areas. We recommend that the project could be based on your previous study and be a subject you'd like to research.	Perhaps opening up the topic areas to be more flexible in what students research could be one approach. We should maybe reconsider when is best to settle on a research idea. Perhaps this is something that could be decided on well before module start, or even as part of a prior module. It certainly needs some thought.
Completing the EMA across the summer when there is school holidays and family holidays to take. I've never quite understood the value of February start dates, I know other students feel the same	The February start date is to allow fieldwork projects to happen during the main growing season.	We will be discussing alternative module timings or submission timings as part of the rewrite.

and it impacts those who are trying to do a masters/ PGCE.

No resources or guidelines on data analysis, I sort of muddled through this on my own but being taught to manipulate primary data sets and including some meta-analysis would have been a really useful skill to learn.	LHCS are bringing in more emphasis on data analysis and statistics throughout the curriculum. There are also resources on the website to support this.	All good ideas that will be fed into curriculum design discussions.
I think the module would be made better with a bit more support for the practical aspects of it, maybe by attending a field school?	LHCS have optional practical lab schools. And an optional field school for S295 (cancelled due to COVID). There are some field work options on S206. However, it would also be good for the OU to consider including optional level 3 fieldwork experience	
I cannot understand why the TMAs are summative. What's the point of knowing after TMA01 already that your final grade is irreparably damaged and there's no way to recover from a bad start?	We need to ensure that students fully engage with the TMAs, since they are important learning steps on the way to the EMA. Formative-only always runs the risk that some students may not pay them the attention they require. However, the exact weighting that's applied to each TMA could do with reassessing.	Various assessment models will be considered at the beginning of the module rewrite process.
Another thing I found really disappointing about S390 is the lack of rigour. Because your tutors aren't that well versed into your topic you can write anything you want to make your case. As long as you bung in some pros and cons and contrasting arguments you get the marks. Nobody is going to check whether you've actually understood the papers, haven't misquoted anything, covered a solid literature base (the right papers, not just a long reference list), cited key papers or haven't conveniently omitted key papers or evidence to make your point. The whole exercise feels really shallow and superficial. You can't discuss your topic with a subject expert either. You're not assessed on your understanding of your research topic at all. I just don't understand what you're supposed to learn from it.	Each tutor has a scientific knowledge and are specialists in undertaking undergraduate project work and supervising such studies. What we are looking for in the project is critical analysis of each students chosen topic. This often means students become the expert in their topics as they progress through the module.	For the rewrite we are considering including more peer-to peer opportunities to discuss and present students ideas and research. This should support critical evaluation skills.
Not having anyone to discuss and reinforce your understanding of the science with. In previous modules we all studied the same concepts and outside of assessments could help each other. Here, the assessment aspect of this module and students' unique topics discourages any such discussion (understandable).	Forums are available on each strand for students to discuss their ideas with each other.	For the rewrite, we are considering adding a group presentation component, so that students can outline and share their project findings with each other, and receive constructive criticism from their peers

Question 5: Students who had studied S390 were asked whether they would have been better motivated if a prize was offered for the top project, or the best projects were published in an in-house undergraduate science journal. Students were also asked what their planned next step is (e.g. further study or career development), how well the module prepared them for their next step, and whether they had any suggested improvements for how the module could better prepare students for further studies or career development.

Headline messages and actions:
- Students unsure whether a prize would motivate them

- Generally positive replies to the idea of publishing some of the projects
- Great to hear how useful this module has been for so many students career prospects

FULL RESPONSE Q5

You said	OU response	Next steps, if appropriate
I like the idea of prizes and the opportunity to be published in an in-house journal. Think that would sound great in an interview! I have mixed feeling regarding the prize for the "best project". Of course, this would be a great achievement for the winning students, and a shiny addition to every CV. However, according to which (subjective/objective) criteria this "best project" would be chosen, what about bias? I think that with the amount of pressure that this module puts on us that having a "prize" for the best report would turn this module into something of a competition to be "the best" and that is something I would very much dislike. For me the prize is knowing that this module completes my honours degree and that I have submitted as good a piece of work as I could.	Mixed views on awarding prizes. Could be motivational but might make others feel pressurised and depressed. More general support for publishing a selection of projects. Partly for prestige, but also to be able to see what a good project looks like.	We will pilot publishing some of the highest-scoring projects in the OU library.
In terms of improvements to the module, I personally would put a greater emphasis on encouraging students to talk to other scientists in the community. I only did this once in this module and I had wished I had done it more, as like the tutors, they help figure out what parts of the project are actually important. Furthermore, it is a skill I have to use a lot now and would definitely have benefitted from a general tutorial on how to approach experts for scientific advice/ discuss their research to help you understand it better. I was definitely encouraged by my tutor to talk to experts when I had suggested the idea, but as a key part of any work in science is communicating to others in the field this should be explored in greater depth.	Nice ideas about adding communication skills	For the rewrite, we're considering adding a communication and feedback aspect to the new module.
Next step for me is continuing my studies with the OU following the Environmental Management master's course (F65) for with I received a studentship for which I am really grateful. I am hoping to go into clinical trials with the NHS and my project has hopefully set me up well for this as I focused on vaccine efficacy of COVID-19 vaccines. I have had three offers for Masters courses, and that I have accepted a place at the University of Sussex to study Global Biodiversity Conservation. This module will be excellent grounding for that course, as we will very quickly be choosing our research projects which will start later in the year. Many of the same principles that we have employed in this project will be relevant here. SXL390 was the most important module I did, doing well in it made me realise that future study may be open to me. It also gave me the confidence to apply for things that I used to think were beyond me. I'm now pursuing a masters/PhD related to my SXL390 project.	Great to hear how the skills developed in S390 are helping students in their existing careers or in further study	

Question 6: Students who had studied S390 were asked whether they had any further comments or suggestions that hadn't been addressed in any of the previous five question threads.

Headline messages and actions:

- Linking projects to current OU research
- Changing the module start date to October
- Messages of thanks to specific tutors

FULL RESPONSE Q6

You said	OU response	Next steps, if appropriate
I would really enjoyed if the projects were related to ongoing research carried out at the OU. E.g., relating to Dynamic Vegetation Modelling (doctoral research) I would have investigated, say, how freshwater resources are/will be utilised.	We have use of a meadow database for SXE390 and SXL390 students We would like to develop similar datasets that can be accessed by all students.	Consider other datasets from current research completed but the schools.
For me the module itself was enjoyable. The biggest challenge for me was the February start date and thus the late results. I did a literature review (SXP) and don't see why I could not start in October. I knew roughly what topic I wanted my project to be on when I registered for the module and all my 'basic' knowledge came from level 2 studies which I then built on through reading appropriate papers.	We're aware of the February start date issue for some students and are considering what could be done within the context of the existing curriculums across three STEM Schools.	Presentation pattern is being considered as part of the module rewrite.
Several students specifically thank their tutors, but those messages are not copied here for GDPR reasons.	We're very happy that you enjoyed your experiences of studying S390 and that you found the module useful for your career aspirations	

Date: December 2021