

Current Directions in Life Sciences

An online course as part of a
blended undergraduate curriculum

Dr Mary McVey & Dr Chris Finlay

Course Rationale

Level 1 Life Sciences Curriculum

- Biology 1A
- Biology 1B
- Chemistry / Science fundamentals
- Third subject of own choosing

Biology 1A is a co-requisite

Motivations:

wanted a subject related to their degree

liked the idea of managing their own time and being able to work flexibly

Current Directions in Life Sciences: Semester 1, 20 credits

Dashboard / MVLS / Schools / Life Sciences / Level 1 / BIOL1012

Current Directions in Life Sciences

School of Life Sciences

Level - 1 Biology

Course Orientation

Introduction

Dementia

Antibiotic resistance

Biotechnology

Personalised medicine

Assessments

Quick links

Class Forum

Noticeboard

Course Information Document

Big Blue Button

Glogster

Group Forum

Biotechnology Glossary

Nucleotide

A subunit, monomer of nucleic acid (DNA/RNA), consisting of deoxyribose or ribose, phosphate group and nitrogenous base (adenin, tymin or uracil, cytozin and guanin).

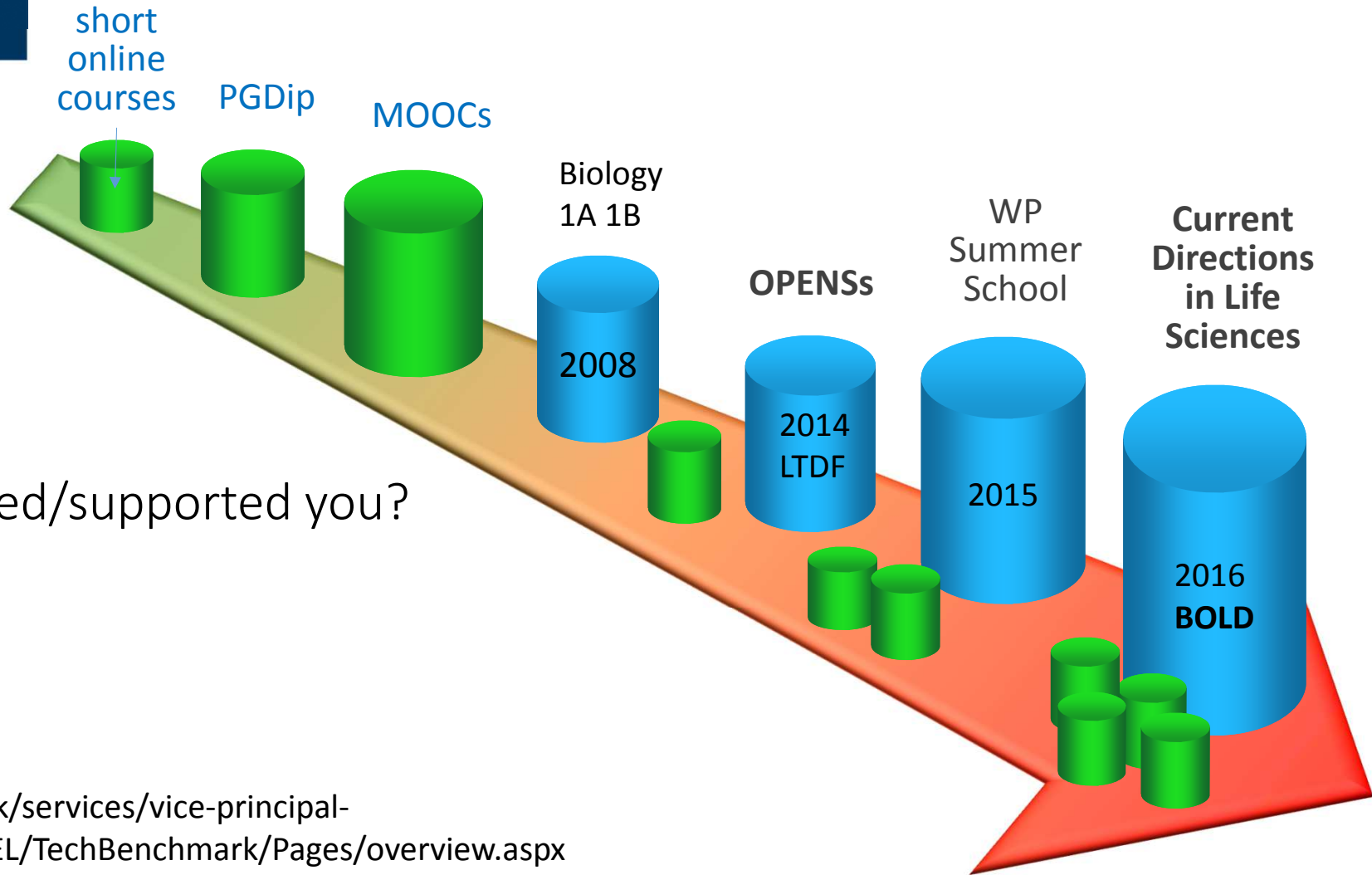
Add yourself

View all entries

Bioinformatics in my degree subject

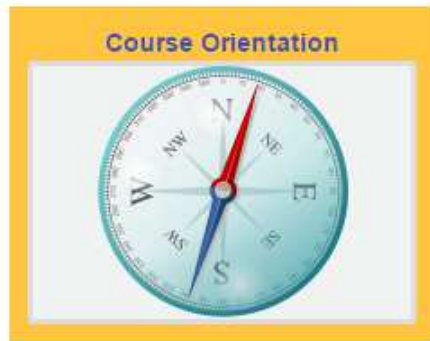
Epigenetic changes in fetal hypothalamic energy regulating pathways are associated with maternal undernutrition and twinning

How you as a teaching professional have transitioned to blended/online learning?



What has helped/supported you?

Brief overview of the CDLS course



Expectations:

- Some had no idea what to expect
- Something which would 'fill up' his 20 credits – however, it ended up being much more than that.
- One student had low expectations: thought content would be general; instead, got to do research on the topics and go in-depth – it ended up being more exciting than expected.

Student transition to online learning

Orientation activities



These Orientation activities have been designed to prepare you for your online learning. You should work through how to use the technologies required to study effectively. The aims of this section are to:

- familiarise yourself with Moodle
- gain an understanding of some of the tools that you may use during your studies
- outline the approaches to communicating online

We will be on hand during this week to answer any of your questions and support you as you work through the course. The best way to ask a question is to use the course forum. Remember - no question is too silly.

- 1. Orientation Tasks
- 2. A Guide to Studying Online
- Getting to know you
- Orientation Checklist
- Lesson 1 Guidance for the Course
- Orientation Feedback

Zara Gladman

Hello! My name is Zara and I'm one of the staff on this course. My chosen degree subject was Zoology.



Importance of peer and staff student interaction



How you have supported your learners' transitions to blended/online learning?

- Glossary
- Webinars
- Assessment
- Practice activities
- Media clips

Introductory Lessons -



Introduction



How to study online



Evaluating scientific research



Vaccines & Vaccinations



MMR & the media

Online tutorial (webinar using Big Blue Button)

Remember to attend the webinar that you signed up for.



It is best to login 10 minutes before the webinar begins to allow you to check your audio, microphone and we you have one) are working.

Feedback: Orientation

- Students were more familiar with Moodle following completion
- Helped students navigate Moodle in their other courses
- Some confusion on where to find information
- sometimes the information was slightly different between pages

Biotechnology Glossary

Gel electrophoresis

A way of separating and analyzing nucleic acids (NA), proteins, and their fragments, based on their size and charge. This is done by applying an electric field to separate the NA/ protein molecules while sifting them through agarose or other non-convective gels. Shorter molecules naturally travel a shorter distance, thus separating them from the long ones.

[Add yourself](#)
[View all entries](#)

Bioinformatics in my degree subject

Function-based identification of mammalian enhancers using site-specific integration.

[Link](#)

I am studying zoology, I chose this paper as I was curious to see some of the challenges with identifying activity in large amounts of DNA fragments

[Add a new entry](#)

How the institution has supported the transition to blended/online learning generally?

- Vicki Dale
- BOLD funding - Interim reports
- MVLS Digital Education Unit
- Media production Unit – Nigel Hutchins & Andrew Sim
- IT services – Steven Jack & Diane Montgomery
- Teaching support, Zara Gladman

Considerations for future development of Current Directions in Life Sciences

- Group work –
 - Online poster presentation / peer collaboration & marking / group size
- Introductory week content
- Order of content
- Build on content delivered by **external experts (+possibly students)**
- Student feedback
 - Glossary of terms.
 - FAQ –from Skype for Business conversations and course forum
- Ongoing evaluation

Recommendations / Questions

- Consider the Add drop period / assessment
- Timing and number of assessments – engaging vs overwhelming?
- Student interaction – important and different
- Easily & frequently Monitor student engagement:
 - ALP allows a score of attendance Questions answered, length of video viewed.
- Always have a plan B, consider the time required to build resources and time to dedicate to give support throughout delivery
- How to how to timetable compulsory online events when student timetables are linked to room booking?
- How to recognise staff contribution in the current Workload model?

All students in the focus group said they would consider taking an online course again, if it was as interesting as this one

Highlights

- [Skype for Business](#) - One student saved questions for the Skype sessions so that other students could benefit from the answers too
- depth of detail
- insight into the world of research and industry
- relevance of the topics
- doing own research using the recommended links

Wish List

- Notification of Deadlines
- Less breadth more depth in Biotechnology
- A model answer with correct referencing

Our transition to blended /online learning

- Dr Chris Finlay, Dr Mary McVey, Dr Beth Paschke, Dr Daniel Keenan, and Dr Katy Stewart. Distance Learning Courses: A First attempt with perspectives on the development and day-to-day running. Proceedings of the 7th Annual University of Glasgow Learning and Teaching Conference.
- Dr Chris Finlay, Dr Mary McVey, Dr Beth Paschke,, Catriona Simpson, Laura Carmichael Liam Doyle and Hazel Hamilton, A Pre-Entry Distance Course on Moodle: articulating 21 course expectations, aiming to impact on access and student confidence. Proceedings of the 8th Annual University of Glasgow Learning and Teaching Conference.
- Dr Chris Finlay, Dr Mary McVey, Dr Beth Paschke, Mr Graham MacIntosh, Dr Leoni DeWert. A pre-entry distance course on Moodle articulating course expectations aiming to impact on access and student confidence <http://www.enhancementthemes.ac.uk/docs/paper/a-pre-entry-distance-course-on-moodle-articulating-course-expectations-aiming-to-impact-on-access-and-student-confidence.pdf?sfvrsn=6>
- Dr Mary McVey, Dr Chris Finlay, Dr Beth Paschke, Mr Graham MacIntosh, Laura Carmichael and Liam Doyle Hazel Hamilton. Development and Student Evaluation of OPENSs - an Online Pre-Entry Nursing Summer School at the University of Glasgow. ELESIG Scotland, University of Dundee 2016
- Dr Mary McVey E-assessment in Life Sciences – ELESIG Scotland, UHI Inverness 2016