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JUNE 17-19, 2019 • ANAHEIM



California Virtual Campus – Online Education Initiative

Online Course Development & Delivery: Science Labs

Bob Nash, Dean of Academic Affairs, CVC-OEI

The Need

- Scarcity of online science lab courses that satisfy IGETC 5C and CSU B3 GE requirements
- More of these courses online = More students completing programs more quickly
- These courses can be found using Finish Faster Online! at cvc.edu

Faculty Panelists

Crystal Jenkins Santa Ana College

Kelly Ruppert Coastline College Roy Mason Mt. San Jacinto College

Tanya Murray Coastline College

Some Background

CSU Executive Order 1100 - GE requirements may be satisfied through courses taught in all modalities

Title 5 §58009 allows alternative attendance procedures for DE labs

<u>C-ID Descriptors</u> for online science labs are not abundant, but you will find some (e.g., Physical Geology GEOL 100 L)

Guiding Notes for General Education Course Reviewers

- CSU B3 & IGETC 5C Science Labs:
 - "must be associated with a lecture component"
 - "course outline clearly distinguishes the lab activity from the lecture"
 - "lab manuals are required"
 - No explicit requirement for hands-on lab activities

Consider This...

- ASCCC Publication
 - <u>Considerations for Fully-online GE Pathways: Online Oral Command Lab Science</u>
- Keep in mind
 - UCs and CSUs accept online courses in these areas, but private colleges may or may not
- Join our Online Oral Comms "Community of Practice"
 - Please leave your name and college email address, and we will enroll you in a Canvas course to continue this discussion

Crystal Jenkins

• Professor, Chemistry



- Time is required to maintain REC/RSI
- Use discussion board topics relevant to students
- A "hands-on" experience allows for an authentic lab experience
- Student verification difficult but not impossible

Kelly Ruppert

• Lecturer, Geology



- Plan your assignments, quizzes, and exams well so you can spend grading time wisely
- Choose your course materials carefully
- Plan to check your email a lot and grade submissions quickly

Roy Mason

 Professor, Biology and Environmental Sciences



- Discuss issues/concerns of offering authentic lab experiences which meet institutional standards for college level transfer courses
- Issues related to presenting authentic, hands-on labs as opposed to virtual lab experiences to online students
- How we actively engage ALL learners, including those with special needs, in successfully completing outcomes and objectives in a fully online environment

Tanya Murray

 Professor, Biology and Marine Science



- Ensuring student engagement, REC/RSI, and learning
- Discussion forum
 practices
- OER vs. lab kits
- OER vs. proprietary
- Documenting student work

ONLINE SCIENCE LABS

Questions?

Answers?

Comments?



Online Course Development & Delivery: Science Labs

Facilitator: Bob Nash Dean of Academic Affairs bnash@cvc.edu

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