

CECS Innovative Remote Instruction Task Force

Preliminary Report - April 15, 2020

CONTENTS

- Introduction 2
- Hospitality & Logistics 3
- Readings & Materials 9
- Instruction & Activities 11
- Assessment & Grading 14
- Advising & Accommodations 17
- Other Concerns 19
- Conclusion 21
- Appendices 22
 - Task Force Members 22
 - Faculty Survey Instrument 22
 - CDL Quality Course Review Criteria 23
 - CDL High Quality Course Review Criteria 25
 - Extra Advisories 27

INTRODUCTION

UCF's move to remote instruction due to COVID-19 during the Spring 2020 semester created many challenges for CECS faculty members. As we approach the end of the semester, we have some extra time right now to plan how we want to continue addressing these challenges moving into the summer semester and beyond. The *CECS Innovative Remote Instruction Task Force* was chartered to address this particular issue and publish shared recommendations for some best practices in the summer term. Two other task forces are considering *Labs* and *Senior Design* issues separately, so those concerns are only touched upon below. The focus of this task force is "best practices for online delivery (including exams)" using five main areas of concern to delineate findings and recommendations:

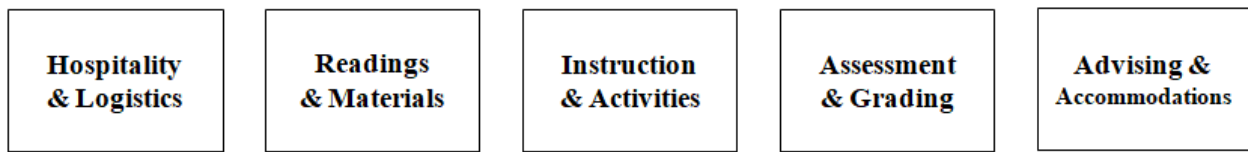


Figure 1 - Functional Areas of Concern

While many of recommendations in this report are based on the experiences of instructors who have taught on-line classes for an extensive period of time, it is critical to point out that this report is not intended as a guide to designing and developing on-line classes. Adjusting an otherwise face-to-face class to be offered remotely during this emergency is not the same as designing an online class. This task force does not expect *anyone* to comprehensively try to implement everything discussed and recommended below. These findings and recommendations should be approached as ideas that might be useful if the reader is experiencing a problem or concern that might be addressed as recommended.

The recommendations in this report are intent to extend and supplement the numerous statements and resources that are already available to UCF faculty around the COVID-19 remote instruction emergency. Foremost among these is the *Keep Teaching* site developed and maintained by UCF Division of Digital Learning:

<https://digitallearning.ucf.edu/newsroom/keepteaching/>

HOSPITALITY & LOGISTICS

This functional grouping includes all aspects of interacting with students related to making sure that they are able to engage in the class and that they understand how the class works. This can include course syllabi and policies, structure and organization of modules and assignments, welcome and informational messages and announcements.

For many students in live lecture classes, the most frequent direct interaction between student and instructor is an *ad hoc* interaction at the front of the classroom during the few minutes preceding the start of class, or directly after the class. It is often in these interactions that students are directly able to adjust their own expectations regarding instructor expectations. Additionally, the days of the week that lectures are offered in an online class provides an implicit modular structure to the class that can form the basis for student planning of readings, activities, and assignments. These interactions and implications can be lost if not planned for in the transition to the online setting.

Note: Interactions constituting Office Hours are discussed under Advising & Accommodations (p.17).

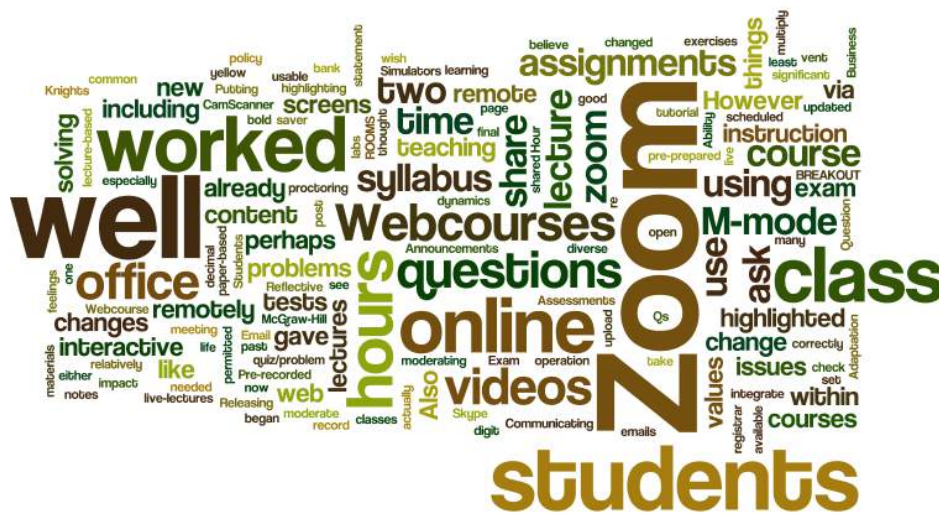


Figure 2 - Hospitality & Logistics, Positive Word Cloud¹

Positive Findings:

- a) Zoom has been universally appreciated by faculty as the communication tool of choice. Many of the tools appear to have been discovered by the faculty themselves (including breakout rooms, share screens, annotate, etc.). A pre-lecture class to help familiarize students with zoom was indicated to help participant engagement.

¹ Word clouds in this report are derived from the verbatim responses received from participating CECS faculty.

- b) Zoom online lectures or pre-recorded lectures followed by zoom sessions used for problem solving seem to have worked. This is a huge opportunity for wide-scale adoption of flipped classrooms.
- c) In general, Webcourses has worked. For example, reorganization of the course syllabus, Announcements, and publisher courseware such as McGraw-Hill’s SimNet or Cengage’s WebAssign.

Negative Findings:

- a) It was largely reported that emails are not effective communication tools – especially for large classes.
- b) Minor delays in Announcements and Emails have been reported by some respondents.
- c) Ensuring all students have adequate hardware and good internet service remains a challenge.
- d) Ensuring that specific software licenses can be downloaded and installed on student-owned computers is a challenge for some classes. CECS IT involvement would become a necessity for such classes (also keep in mind that additional \$\$\$ may be needed for purchasing personal use licenses).
- e) There are no clear or uniform testing / proctoring strategies adopted by faculty. Depending on class content, each faculty has adopted a different testing strategy / software platform.

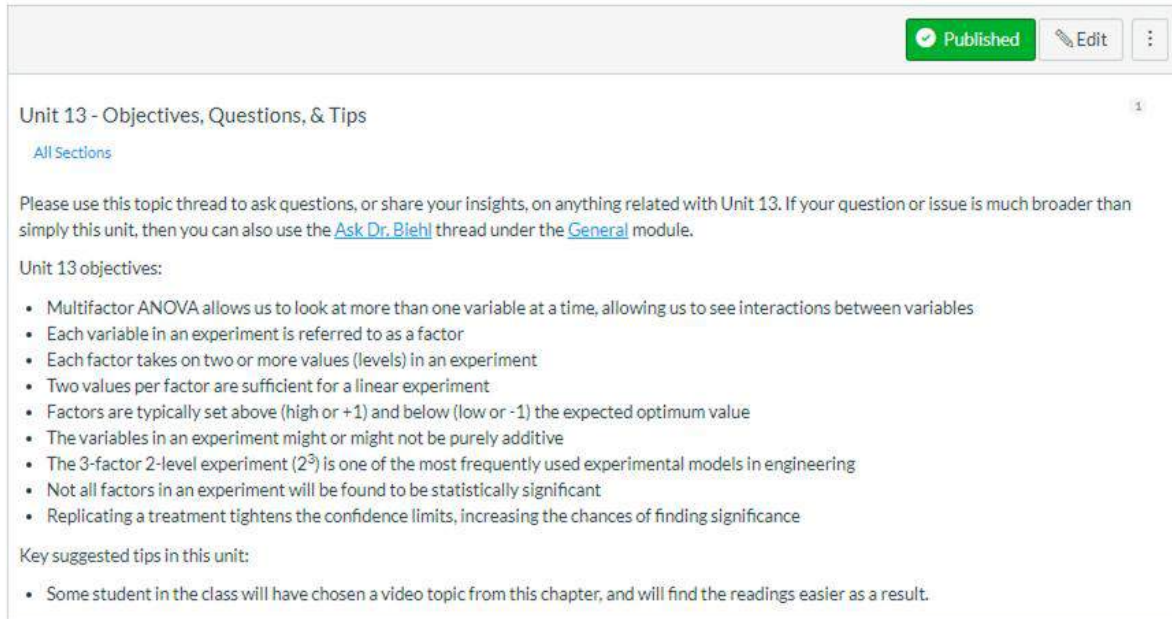
Recommendations:

- a) Implement a module structure to the WebCourses classroom if not already provided, preferably with each module corresponding to one week of class, mimicking the way students typically approach the week for live classes.
- b) Within each module, include all readings, assignments, and handouts for the week. Entries not corresponding to linkable assignments or resources should be included as Text Heading entries.



Figure 3 - Sample weekly module with item-specific requirements

- c) Recognizing that students in live classes don't usually know exactly what will be happening in class until they get there, weekly modules should remain UNPUBLISHED until the time at which the unit actually begins in the class. Make sure that content is published and unlocked well in advance of "class time" (typically Saturday morning 6:00a) so that students can complete assigned readings and assignment before attending class or watching video lectures.
 - a. Alternatively, the modules can be published at all times, and the Unlock Date can be used to release the content to students at the appropriate selected time. This option risks overwhelming students with a great deal of content, but the unpublished alternative has the downside of keep students who want to know what is coming in the dark.
 - b. Both alternatives have benefits, but using unpublished as the mechanism more closely mimics the information that would be available to students on a week-to-week basis if the content is normally revealed by attending the live class.
 - c. A hybrid of these two options might include using the module Unlock date to open the content at the selected time, while also leaving the module unpublished until a week before it will be used. This hybrid makes current content available to students, as well as providing locked visibility into the next upcoming unit.
- d) Use the Module: Edit function to assign requirements (e.g. View, Contribute, Submit) to as many elements of the module as possible (it can't be done for Text Heading entries). This will ensure that instructors can use the View Progress function (on Modules page) to see which module entries have been completed by students, and students see check-marks associated with items they have completed.
- e) Add a *Questions & Tips* ungraded discussion as the first entry in every module, making the name of the discussion unique by adding the module or unit number (e.g. Unit 13 – Questions & Tips).



Unit 13 - Objectives, Questions, & Tips 1

[All Sections](#)

Please use this topic thread to ask questions, or share your insights, on anything related with Unit 13. If your question or issue is much broader than simply this unit, then you can also use the [Ask Dr. Biehl](#) thread under the [General](#) module.

Unit 13 objectives:

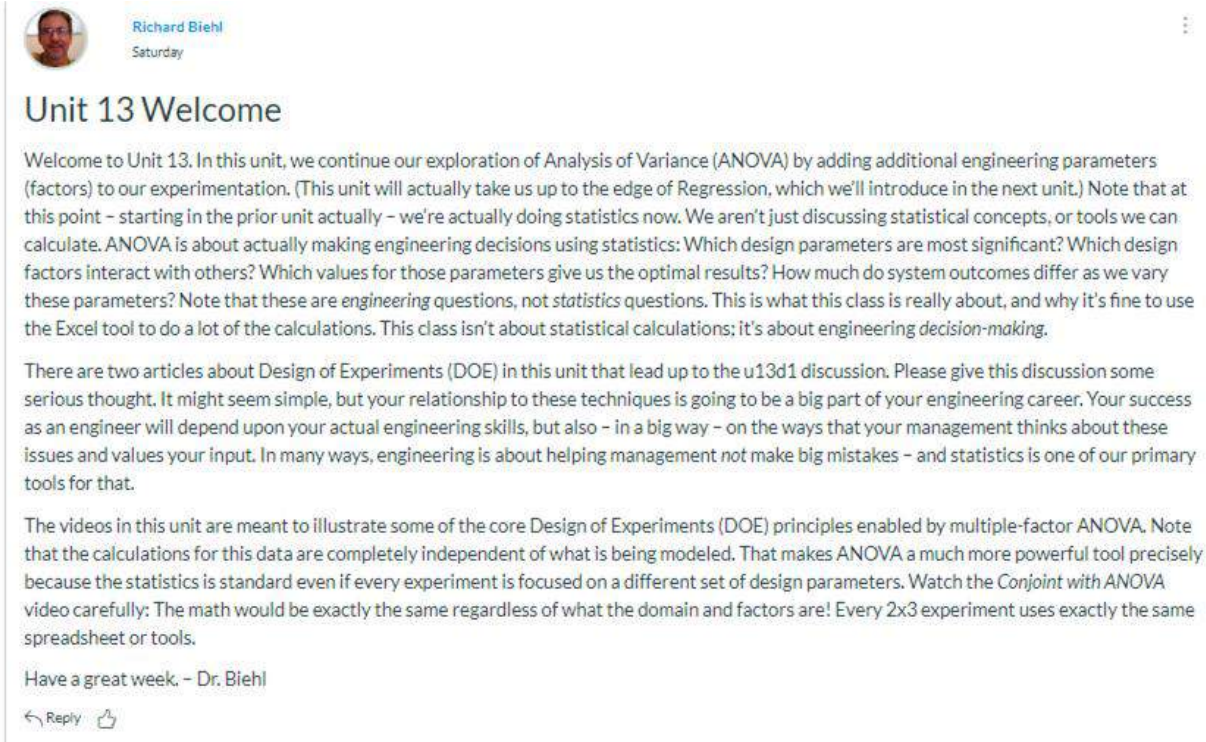
- Multifactor ANOVA allows us to look at more than one variable at a time, allowing us to see interactions between variables
- Each variable in an experiment is referred to as a factor
- Each factor takes on two or more values (levels) in an experiment
- Two values per factor are sufficient for a linear experiment
- Factors are typically set above (high or +1) and below (low or -1) the expected optimum value
- The variables in an experiment might or might not be purely additive
- The 3-factor 2-level experiment (2^3) is one of the most frequently used experimental models in engineering
- Not all factors in an experiment will be found to be statistically significant
- Replicating a treatment tightens the confidence limits, increasing the chances of finding significance


Key suggested tips in this unit:

- Some student in the class will have chosen a video topic from this chapter, and will find the readings easier as a result.

Figure 4 - Sample Questions & Tips ungraded discuss including unit-level learning objectives

- f) As each unit opens each week, post a unit-specific welcome message to the Questions & Tips discussion for the unit covering the learning objectives for the unit and any observations that will help students orient to the week's assignments and activities.



 Richard Biehl
Saturday

Unit 13 Welcome

Welcome to Unit 13. In this unit, we continue our exploration of Analysis of Variance (ANOVA) by adding additional engineering parameters (factors) to our experimentation. (This unit will actually take us up to the edge of Regression, which we'll introduce in the next unit.) Note that at this point – starting in the prior unit actually – we're actually doing statistics now. We aren't just discussing statistical concepts, or tools we can calculate. ANOVA is about actually making engineering decisions using statistics: Which design parameters are most significant? Which design factors interact with others? Which values for those parameters give us the optimal results? How much do system outcomes differ as we vary these parameters? Note that these are *engineering* questions, not *statistics* questions. This is what this class is really about, and why it's fine to use the Excel tool to do a lot of the calculations. This class isn't about statistical calculations; it's about engineering *decision-making*.

There are two articles about Design of Experiments (DOE) in this unit that lead up to the u13d1 discussion. Please give this discussion some serious thought. It might seem simple, but your relationship to these techniques is going to be a big part of your engineering career. Your success as an engineer will depend upon your actual engineering skills, but also – in a big way – on the ways that your management thinks about these issues and values your input. In many ways, engineering is about helping management *not* make big mistakes – and statistics is one of our primary tools for that.

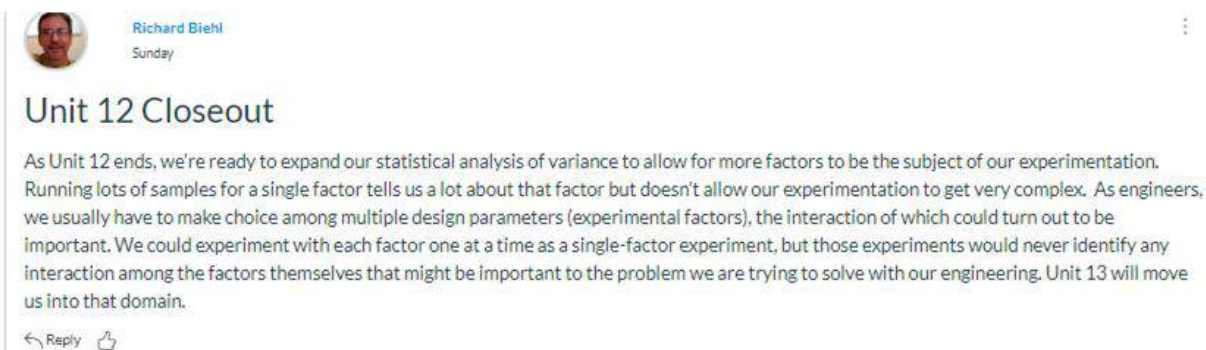
The videos in this unit are meant to illustrate some of the core Design of Experiments (DOE) principles enabled by multiple-factor ANOVA. Note that the calculations for this data are completely independent of what is being modeled. That makes ANOVA a much more powerful tool precisely because the statistics is standard even if every experiment is focused on a different set of design parameters. Watch the *Conjoint with ANOVA* video carefully: The math would be exactly the same regardless of what the domain and factors are! Every 2x3 experiment uses exactly the same spreadsheet or tools.


Have a great week. – Dr. Biehl

[Reply](#)

Figure 5 - Sample unit-level Welcome posting

- g) As each unit closes each week, post a unit-specific closeout message to the Questions & Tips discussion for the unit covering last thoughts and observations, and to signal to students that the class has moved on to the next unit by providing an *advanced organizer* for the next unit's theme.



 Richard Biehl
Sunday

Unit 12 Closeout

As Unit 12 ends, we're ready to expand our statistical analysis of variance to allow for more factors to be the subject of our experimentation. Running lots of samples for a single factor tells us a lot about that factor but doesn't allow our experimentation to get very complex. As engineers, we usually have to make choice among multiple design parameters (experimental factors), the interaction of which could turn out to be important. We could experiment with each factor one at a time as a single-factor experiment, but those experiments would never identify any interaction among the factors themselves that might be important to the problem we are trying to solve with our engineering. Unit 13 will move us into that domain.

[Reply](#)

Figure 6 - Sample unit-level Closeout posting

- h) Encourage students to turn on maximum Notifications in WebCourses so that they see changes and requirements in real-time as things happen in the class.

- i) Consider the features of WebCourses that are being used to enable remote access, and provide specific early orientation content (e.g., video, tip sheet) on the use of these features (particularly Zoom) with an emphasis on features not typically used in live class settings.

Recommendations:

- a) Align WebCourses modules with the units of coverage in the course so that the WebCourses modular structure provides an organizing guide for students.
- b) Upload all materials that might have been handed out during a live class so that students can access them directly.
- c) Include among downloadable handouts all files and materials that are used in any of the lecture videos so that students have their own copies of those materials.
- d) Make any publisher resource materials for your assigned texts available to students. These materials can be interactive, thereby holding students' focus and attention. Additionally, there may be integration of these materials with Webcourses (e.g., Pearson), which is helpful for students keeping track of due dates. These materials might include PowerPoint presentations, eText materials, additional videos, homework assignments, and practice problems.
- e) When multiple supplemental materials are being offered at one time, consolidate links to these materials onto subject-specific wiki pages in WebCourses, including an introductory note or annotation for each file to provide context and clarity. Students should be able to see any notes when downloading files so that appropriate context is established.

INSTRUCTION & ACTIVITIES

This functional grouping includes all aspects of engaging students in learning through instructional lessons and activities, including direct lectures, or online simulated learning environments. It includes any homework activity designed to reinforce learning.

The functional grouping constitutes the most immediate and obvious shift in classes moving from live to online settings, and typically requires the largest scope of changes to be made in the class. The shift typically requires disconnecting the instructional lecture from its impact on student in-class engagement.

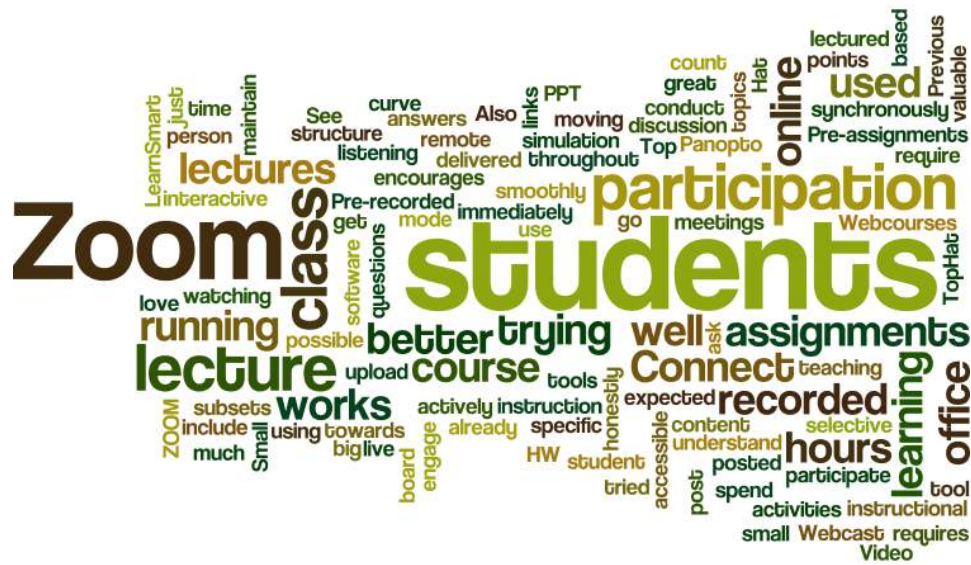


Figure 8 – Instruction & Activities, Positive Word Cloud

Positive Findings:

- Zoom has been well received among faculty, with many reporting positive experiences that have exceeded expectations for many. It is supporting effective synchronous class time with direct interaction among instructors and students.
- Student interaction tools – particularly iClicker and Top Hat – are viewed as helpful. In particular, they can play a more effective role in the synchronous distributed environment compared to their use in live class settings.
- WebCourses discussions are also being effectively used to measure student engagement and participation, particularly after asynchronous use of recorded materials.

Negative Findings:

- a) The Zoom interface presents challenges when used synchronously as instructors giving lectures also have to pay attention to the chat feature simultaneously. This can be partially alleviated using TA attention or designating a student volunteer to monitor the chat and signal issues to the instructor.
- b) The timeliness of responses in WebCourses discussion threads was identified as an issue, but effective use of due dates and instructor timing can alleviate many concerns.
- c) Challenges are seen in deploying activities or assignments where students would traditionally be making live class presentations. Zoom can handle some of this, but it immediately raises the issue of technology compatibility among student devices and network connections, many of which aren't seen as problems until actual class time. This could be supported by providing in-advance test/practice assignments in which students can test their interfaces and connections prior to class. ProctorHub (under Faculty Tools) offers an excellent option of a page where students can test their video functioning and compatibility.
- d) Bandwidth limitations can impact the effectiveness of Zoom interactions, particularly as class size grows. This issue is exacerbated in settings where faculty members are working alongside family members also sharing the same internet connection. This might necessitate some in-house scheduling and prioritizing, particularly during scheduled class times.

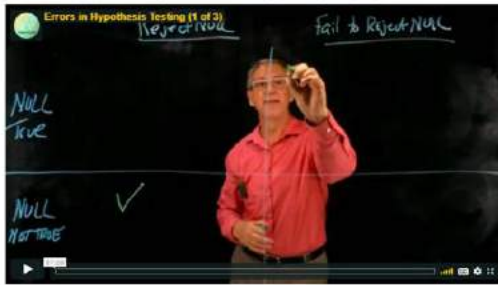
Recommendations:

- a) Classes that continue to meet in a synchronous manner (e.g. via Zoom during normally scheduled class times) should shift toward a more *flipped* pedagogy, meaning that recorded lectures are not used to form the basis for synchronous sessions. Live sessions can be used for question and answer and discussion activities in order to maintain student connectivity and engagement.
- b) Recorded lectures should be kept to less than 10 minutes each, and will typically include whatever visual medium (e.g. PowerPoint slides, document camera) would normally have been used while covering the same material in the live setting.
- c) Create a Page in WebCourses (linked from the week's unit module) to consolidate all of the video materials created for the week's classes. This might typically include 5-7 video lectures for the week. Keep in mind that the information density (i.e. new material discussed per minute) of recorded videos is much higher than in a live lecture. We often aren't aware of how much we repeat ourselves during a live lecture, or of how often we go off on tangents. Typically a 10-minute lecture video will cover what would have been about 20 minutes of class time.

u10v1 - Hypothesis Testing Videos

Types of Error in Hypothesis Testing

The distinction between Type I and Type II error -- also known as Alpha and Beta error -- is introduced, with an emphasis on recognizing that different engineering applications will need to optimize a balance between these two types of error differently. It is a common misconception that Type I error should always be minimized. In fact, this approach equated Type II error which might be the worst possible thing to do in an engineering design.



Distinguishing Alpha vs. Beta Error

Alpha error derives directly from the selection of the confidence boundary or interval selected during analysis -- it is in the control of the statistician selecting it. Beta error is a result of that Alpha choice PLUS the reality of the true population represented by the sample -- it is unknown, and often unknowable. The Power of our statistical test is a result of the interaction of these two factors.

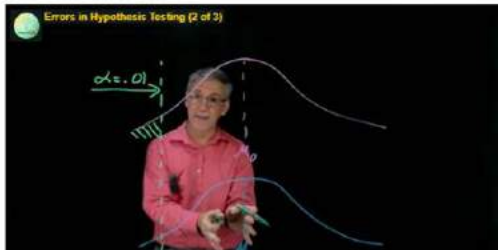


Figure 9 - Sample page consolidating unit lecture videos

ASSESSMENT & GRADING

This functional grouping includes all formative and summative assessments – including student peer review – and any associated grading rubrics. Concerns go beyond assessing student learning to include issues of student conduct through security and control.

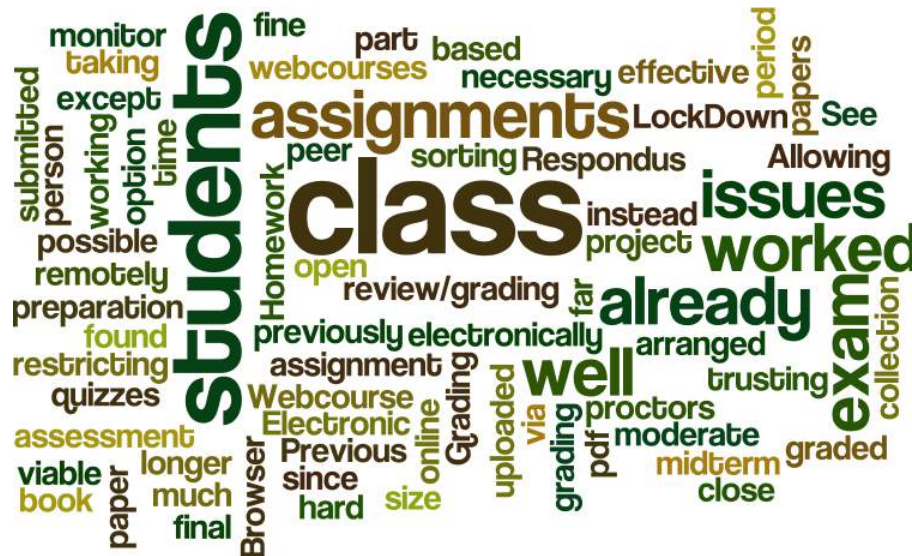


Figure 10 – Assessment & Grading, Positive Word Cloud

Positive Findings:

- a) Classes that have been using the Evaluation & Proficiency Center (EPC) have already taken steps to make their assessments available in a remote setting (in the EPC rather than in the live classroom), making for an easier transition in this remote class initiative.
- b) There are numerous technologies available and supported at UCF to assist with making assessments available remotely, each of which offers some advantages.

Negative Findings:

- a) The variety of technologies for remote assessment available at UCF are not all cross-compatible, making the choice of what to use more difficult.
- b) Inconsistencies in the choices made for assessments will impact students who are in multiple classes that might make different choices.
- c) The tools for remote testing tend to concentrate on student behaviors for academic integrity and less on supporting learning goals and content assessment.

Recommendations:

- d) For design-oriented courses, consider assigning an assessment project instead of a major exam, or potentially a set of increasing challenging smaller projects through the semester.
- e) Consider using open-book open-note assessments to lower the likelihood of student conduct issues related to unauthorized access to materials during remote testing. Generally, this will allow for more complicated test content representing a more authentic application of the knowledge and skills covered in the class.
- f) Consider multiple *formative* assessments for assignment and non-serious quizzes in order to reduce the pressure on students, and the likelihood that student conduct will welcome an issue.
- g) For more substantial summative assessments, multiple options exist (and would require modifications to the course syllabus to included chosen technologies if not already used in the course) depending upon assessment type and class size:
 - a. **The Honor Code.** Take home exam with time limit. Students need access to internet and can login into the exam via Webcourses with no security. The time limit can be obtained from your past average exam time duration or from the EPC if you had exams there in the past. Give them the exam during class time or other preset time period) to deter students from cheating by working together or accessing unauthorized materials.
 - b. **ProctorHub in WebCourses.** ProctorHub provides visual security of student identify and local proximity while working on exams embedded in WebCourses. See the Appendix for details and resources.
 - c. **LockDown Browser.** (Not recommended) This option locks down the students in the computer in which they are working, but they still have access to the internet with a different computer, cell phone, laptop, books, etc. You may time it too (as above), but you don't see what the student is doing nor who is helping them.
 - d. **LockDown Browser + Respondus Monitor.** (Recommended) This option provides extensive security but may come with some technical difficulties, many of which might not be apparent until the exam is in progress. See the Appendix for details and resources.
 - e. **Alternate assessments.** Creating alternative written assessment assignments that can be checked for originality and plagiarism using turnitin.com allows assessment activities to be spread out over a more extended timeframe. These can include brief reflective reports on important topics that cannot be copied and have fairly easy grading. This option is being explored by the CECS Teaching & Learning Committee.
- h) Consider having an assignment in tandem with actual assessments in which student submit any scrap paper that they used during the assessment, possibly supporting post-assessment review as well as increased mindfulness of the independence of work by students themselves.

- i) Different combinations of the above options are possible.
 - a. One of the best two options will be the LockDown Browser with Respondus Monitor that reveals the student environment before the test begins.
 - b. One of the issues is the students do not show their ID well to Webcam and you end up checking it with the pictures available from "Faculty Tools" to verify the students identities.
 - c. One may also choose ProctorHub with LockDown Browser, which is slightly different in the way that it does not take a video of the students while they write the exam but pictures every short time intervals. However, ProctorHub shows the students' pictures embedded in Webcourses and retrieves them out from "Faculty Tools" and places them for you to compare the pictures the webcam took.
 - d. It might be best to add ProctorHub + LockDown Browser + Respondus Monitor. We have not tried this combination for hundreds of students and as such we cannot recommend them due to possible technical issues. However, you may try it if your class size is less than a 100 students.

The appendices include additional details and resources for each of the options described above, including some details on *Honorlock* which was considered too new to UCF to be evaluated effectively by this task force.

ADVISING & ACCOMMODATIONS

This functional grouping includes all aspects of non-instructional direction and coordination of student activities, including office hours, as well as implementation and monitoring of any issues related to student accommodation (whether or not formally through Student Accessibility Services).



Figure 11 – Advising & Accommodations, Positive Word Cloud

Positive Findings:

- a) Instructors can consider setting regular office hours using Zoom meeting in which students who have questions can attend and ask questions, others can also join to listen to the discussions.
- b) Timely response to student questions and concerns have a substantial impact on their engagement and progress.
- c) Students can be encouraged to reach out to the instructor for all their questions and concerns using email and Webcourses and issues that require one-to-one discussion can be managed through private meetings on Zoom.
- d) Recording Zoom lectures and Q&A sessions gives students access to those recordings from Webcourses. Students can and will go back to watch the recordings.
- e) In recorded lecture videos, adding a lecturer's window showing the instructor's face will help hearing-impaired students. Recording a lecture in Zoom will automatically add that window.
- f) If you can upload your lectures on YouTube, subtitles will be automatically added after a short while which will further help the hearing-impaired students.

Negative Findings:

- g) Many students are living in environments that might not be conducive to traditional class, homework, or study schedules. Some students are parents who currently have childcare responsibilities because of school closures, and others simply are sharing computers and Internet access of limited bandwidth with family or household members.

Recommendations:

- h) Offer a *Questions & Tips* ungraded discussion thread in each unit for student to ask questions in an asynchronous manner. (Alternatively, create an *Office Hours* ungraded discussion thread that is always available for asynchronous questions from students if you don't want to create a separate one for each course unit or module.) Encourage students to use these discussions to ask any questions that don't require any form of privacy. Also encourage all students to feel empowered to help answer any questions that they see. Doing so will reduce instructor workload because students can see previous questions and answers; avoiding many repetitive and redundant email message exchanges.
- i) Post frequently asked questions (FAQs) that you can immediately anticipate – typically based on prior class offerings – into the Questions & Tips discussion thread without waiting for students to ask.
- j) Use Zoom to offer scheduled virtual (synchronous) office hours for the class to ask questions and address concerns. This should be done as “open office hours” that any student can enter, and alternative private sessions (either in separate Zoom sessions or as individual manually-setup breakout rooms) should be available to be requested by students who have an issue that requires privacy. Open office hour sessions should be recorded to be available asynchronously to the entire class. Alternatively, the WebCourses functions for Conferences or Chat can be used as additional implementation options.
- k) Offer an additional ungraded discussion thread specifically for student to discuss and share issues with each other that might go beyond class concerns, such as this COVID-19 emergency. (Outside of emergency situations, these discussions are sometimes named *Cyber Café*.)
- l) Students who normally use the student accessibility services should be handled by the instructor. If the due dates for assignments are set in Webcourses, those students could be given the option to email their work to the instructor and this way their submission will be automatically timed.
- m) Provide maximum flexibility when scheduling synchronous contact with students to allow them to adjust their own schedules. Don't presume students are currently available at times where classes might have been held. Students might need evening and weekend contact in order to be able to be completely successful. Within reason, faculty members need to accommodate these needs as much as possible.

OTHER CONCERNS

This functional grouping includes any other aspect not readily falling in the first five groupings.

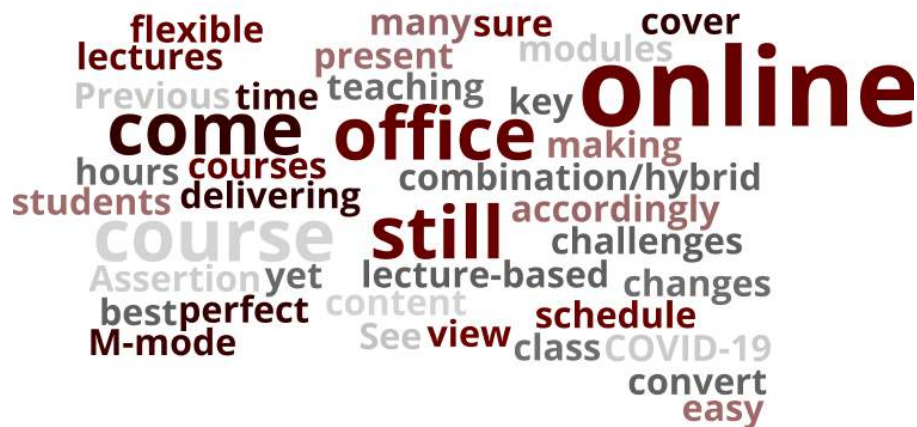


Figure 12 – Other Concerns, Positive Word Cloud

Positive Findings:

- a) The social dynamic in the remote setting is surprisingly traditional in terms of the types of student interactions that occur with the instructor and other students. The mechanisms of interactions change, but the types and frequency of interaction is quite recognizable.

Negative Findings:

- a) Faculty members expressed concern over some restrictions placed on them when using Canvas. If faculty were allowed to add a designer to their own classes, they could support and assist each other without having to go through CDL. An inability for faculty members to allow each other design access to WebCourses classes is described as an unnecessary bottleneck in obtaining peer support.
- b) Some faculty reported delays in the posting of announcements that could not be explained by the task force. Faculty can double-check their notifications settings in the same way students are being recommended to do so, potentially resolving some performance and timing issues.

Recommendations:

- a) Continue to use our Engineering & Computer Science Librarian, Buenaventura Basco, to identify and access resources that can be used in your class.
- b) When in doubt, ask the students for their opinions and test the mechanisms you are considering using in your adaptation.

- c) Consider the various criteria associated with CDL's *Quality Review* and *High Quality Review* processes. (see appendices) These two sets of criteria document many useful guidelines for designing and building online courses in WebCourses, *some* of which might be helpful in solving specific issues or problems associated with this short-term push for remote face-to-face classes. The formal review process is reserved for "W" classes only, but the criteria might be considered more universal.

CONCLUSION

This emergency-driven move to complete remote instruction for live UCF classes has accelerated a movement that has already been taking place in educational instruction for several years. Most of the recommendations in this report can be construed as valid even absent this COVID-19 emergency. As a result, the task force expects and hopes that many of the changes being made by faculty members to meet the current challenge will become part of standard practice across CECS in the near future.

- A. Reduce reliance on content lectures during regularly scheduled class sessions.
- B. Introduce more readings over lectures that would recite the body of knowledge.
- C. Use class discussions to increase student engagement over passive attendance.
- D. Use live class time to engage students in activities and problem solving.
- E. Shift toward more authentic assessment techniques rather than traditional exams.

APPENDICES

Task Force Members

Reza Abdolvand	Electrical & Computer Engineering
Parag Banerjee	Materials Science & Engineering
Richard Biehl	Industrial Engineering & Management Systems
Celina Dozier	Civil, Environmental & Construction Engineering
Marino Nader	Mechanical & Aerospace Engineering

Special thanks to:

Wendy Howard	Pegasus Innovation Lab
Patsy Moskal	Digital Learning Impact Evaluation

Faculty Survey Instrument

The faculty survey was conducted in Qualtrics from April 1st to April 6th, with 18 faculty members responding. The survey included the six functional groupings that provide the overall structure for this report:

- A. Hospitality & Logistics
- B. Readings & Materials
- C. Instruction & Activities
- D. Assessment & Grading
- E. Advising & Accommodations
- F. Other Concerns

Two questions were asked for each grouping:

- A. What ideas or practices do you feel have worked well in this area for you?
- B. What ideas or practices do you feel haven't worked well in this area for you?

CDL Quality Course Review Criteria



Section 1: Course Overview and Introduction

- The course provides a clear starting point for students to begin accessing vital course components, such as syllabus, course schedule, course content, and assignments.
- The syllabus includes the following Provost-required course information.
- Information about academic integrity/honesty (UCF Golden Rule), campus policies, and FERPA are provided within the syllabus.
- Up-to-date information for students with disabilities to connect with UCF's Office of Student Accessibility Services (formerly Student Disability Services) is provided within the syllabus.
- Statement regarding emergency procedures and campus safety are provided within the syllabus.
- Statement regarding accommodations for active duty military students is provided within the syllabus.
- General technical support information is provided for students (e.g., Webcourses@UCF Support contact information, Service Desk contact information).
- Online etiquette ("netiquette") expectations for course communication are clearly stated (e.g., discussion boards, email, chat, web conference).
- Expectations for instructor response time and feedback are clearly stated (e.g., questions, email, assignment feedback).
- Students are offered the opportunity to meet the instructor (e.g., introduction video, written instructor bio).
- The course has an explicit pace (e.g., a schedule).

Section 2: Course Content

- The course has an explicit structure (e.g., organized in modules, units, and/or topics; tools not pertinent to the course are hidden in the menu).
- The course offers a variety of instructional materials and media (e.g., external readings, assignments, discussions, videos).
- Content is displayed in ways that support learning (e.g., chunking, Pages as opposed to Word docs and PDFs, etc.).
- The course offers opportunities for students to engage with the content to enhance learning.
- Technical support information (e.g. tutorials, instructions) for using technology tools are provided.

Section 3: Assessment and Interaction

- Module objectives and/or goals are measurable and clearly stated.
- Module objectives and/or goals are aligned with learning activities and assessments (Please note that this review is intended to be brief, so not all modules will be checked if there are many)
- Grading criteria for each learning activity is described (e.g. rubrics).
- Multiple methods and opportunities for students to demonstrate learning are offered.
- Technology tools support learning objectives and/or goals.
- Technology tools support a variety of interactions (e.g., student-to-student, student-to-content, student-to-instructor).
- The course offers opportunities for students to interact with other students to enhance learning (e.g., discussions, group work).

CDL High Quality Course Review Criteria



Section 1: Course Overview and Introduction

- Course syllabus includes prerequisite knowledge, and/or technical and other competencies (e.g., prerequisite courses to be completed, necessary skills).
- An introduction to the university's academic services and resources available to support student success (e.g., Therapy Assisted Online [TAO] Self Help, Knights Online, Student Accessibility Services, Writing Center, Tutoring Center) is provided.
- An introduction to the university's non-academic services and resources available to support student success (e.g., Victim Services, Career Services) is provided.
- Required hardware and/or software necessary for participating in the course are communicated to students (e.g., microphone, webcam).
- Links to the privacy policies of third-party tools are included.
- Links to the accessibility statements of third-party tools are included.
- An orientation, introduction, or overview is provided for the course (e.g., Canvas Page, video, syllabus).
- An orientation, introduction, or overview is provided for each module or unit in the course (e.g., Canvas Page, video).

Section 2: Course Content

- Technologies used within the course are current (e.g., SWF and FLV files have been replaced with newer technologies/methods).
- Instructional materials are current, best representing the discipline and reflecting current trends.
- The course content and media are copyright compliant and appropriately cited.
- The course content is readily attainable, including external links, resources, and technologies.

Section 3: Assessment and Interaction

- Assessments promote higher-order thinking skills (e.g., apply, analyze, compare and contrast, classify, assess, create, evaluate).
- Students are given multiple opportunities to self-assess and/or reflect on their learning (e.g., ungraded surveys, practice quizzes/activities, written assignments, discussions) throughout the semester.
- Measures to promote academic integrity are included (e.g., authentic assessments, multi/varied assignments and quizzes, ProctorHub).
- An opportunity for students to introduce themselves to develop a sense of community is provided.

Section 4: Accessibility and Universal Design

- Text is formatted with titles, headings, and other styles to enhance readability and improve the structure of the document.
- There is enough contrast between text and background for the content to be easily viewed.
- Text is understandable when viewed without color (i.e., italics or bold are used for emphasis rather than color alone).
- Hyperlink text is descriptive and makes sense when out of context (avoid using "click here").
- Table header rows and columns are assigned.
- A text equivalent for every graphic is provided (e.g., "alt" tags). No excessive use of images when text can be used instead (e.g., screenshots of PPT slides).
- Graphics and images are understandable when viewed without color.
- Multimedia (audio, graphics, and video) is easy to access and use (e.g., presentation pace can be controlled by student; video can be resized; available on mobile devices)
- Video files have synchronous captions. Prerecorded audio files have available transcripts.

Extra Advisories

Zoom Resources

(Source: UCF FMC e-mail)

Zoom has become very important at UCF very rapidly, and we understand that it can feel overwhelming to those that aren't familiar with the tool. That's why the fine folks at CDL have compiled a list of relevant guides for Zoom at this website:

<https://cdl.ucf.edu/support/webcourses/zoom/>

Additionally, Dr. Christine Hanlon has given permission to share her amazing Zoom videos she created and we are so incredibly thankful for that:

<https://www.youtube.com/channel/UCy-6H3GKpY7pKWgKxJ5MRtw>

Hopefully these resources will help you get started with Zoom, understand some of Zoom's more advanced features, and answer some of your frequently asked questions. As always if you need some extra help with anything multimedia or Zoom related, FMC can be contacted.

Zoom Security

(Source: UCF Information Security Office)

If you are using Zoom for instruction, here are some steps you can take to mitigate disruptions:

- Do not make meetings or classrooms public: Zoom can require a password or the use of a waiting room feature to control admittance. For UCF meetings, both options are on by default.
- When possible use a random meeting ID when scheduling. Do not share a personal ID link to a meeting or classroom on publicly available social media; instead, provide meeting links to specific people.
- Ensure screen sharing is set to "Host Only" under Zoom's Advanced Features. This should be on by default.
- Make sure you, and those in your meeting, are running the latest version of the Zoom client to benefit from the latest security updates. To manually update your client, click your profile picture after logging in and select "Check for Updates."

Only access Zoom through the <http://ucf.zoom.us> sign on with NID and password, or access through WebCourses.

iClicker

(Source: iClicker-specific webinar)

To use iClicker during synchronous class time (e.g. Zoom or WebCourses conference), consider using setup options tailored to this type of usage:

- Set the class as “Mobile Only” rather than the dual device default since there’s no live class where you could be setting up your receiver station.
- Turn OFF the new Monitor Student Focus feature (normally used to detect students who are browsing the web during class) if you are using it because if students are using a single device to access both iClicker and lecture content in different browser tabs, any reported loss of focus will be incidental.
- Do NOT run the Attendance feature since your Q&A activity will automatically capture attendance.
- Do NOT set a location requirement (typically used to ensure that students are actually present in the live class) since students might be anywhere at this time.
- Set poll questions to send screen at START of poll so that students toggling between iClicker and WebCourses (Zoom or Conference) can see the question regardless of which window they are focused on.

Honorlock Highlights

(Source: CECS internal email)

Honorlock feature highlights:

- It detects copies of your exam banks and destroys them.
- It detects use of mobile
- It detects voices, like Respondus Monitor
- Prevents suspicious activities from continuing (not sure how)
- It does say it proctors the student, but does not say how.

Does it share the screen? Not sure.

You can request a demo when you visit their website.

Honorlock for faculty use is available here: <https://honorlock.com/faculty/>

UCF Library

(Source: Ven’s emails)

Our Engineering & Computer Science Librarian is Buenaventura Basco at Buenaventura.Basco@ucf.edu

See <https://guides.ucf.edu/continuity>

You can email him directly or call him at 407.823.5048 if you have any questions.

ProctorHub

(Source: Center for Distributed Learning)

For faculty:

Implement ProctorHub with Quizzes:

<https://cdl.ucf.edu/support/webcourses/guides/implement-proctorhub-quizzes/>

Review ProctorHub Videos:

<https://cdl.ucf.edu/support/webcourses/guides/review-proctorhub-videos/>

Frequently Asked Questions:

<https://cdl.ucf.edu/support/webcourses/guides/proctorhub-faq-instructors/>

For students:

Student Frequently Asked Questions:

<https://cdl.ucf.edu/support/webcourses/guides/proctorhub-faq-students/>

Webcam Testing Page:

https://proctorhub.cdl.ucf.edu/proctorhub/test_webcam/

Webcourses@UCF Support is available to help faculty members and students with ProctorHub.

CDL stresses that ProctorHub is only Identity Verification and not Cheating Prevention.

LockDown Browser + Respondus Monitor

This option will be very secure but also have the potential to cause some **technical difficulties**.

Respondus Monitor requires a computer with a camera and microphone to work. Video is recorded for each student during the testing session.

Respondus has offers this option free of charge for 2 months this spring. Due to this, their support team will likely be swamped with new user requests for assistance with all the schools who will be transitioning to this option. This means they could receive many support questions until students are accustomed to the new process. As this is a new venture for our staff, we will be learning as we go along but will be here to support you and your student needs to the best of our ability.

1. Video's take 12 hours to process after the student ends their testing session.
 - a. The software uses AI to determine times of concern and flags them during this process period.
 - b. The instructor would then go back and view the flagged periods during the video in Canvas and determine if there was any academic misconduct. ONLY the instructor can view the video.
2. Some options to take to increase academic integrity:

- a. Require the exam to be taken by all students at a specific time frame. We suggest during your scheduled class time. The goal of this would be to reduce students' ability to work on the exam together.
 - b. Limit the amount of time the students have to take the exam. If you have used the Testing Center previously, we can provide your historical average exam time from previous semesters if this would help determine how much time you would like to provide. The goal of this would be to limit excessive time to possibly look up information even though the camera and microphone would be a strong deterrent.
3. How to enable LockDown Browser and Respondus Monitor on your exam:
<https://www.youtube.com/watch?v=7J1K8-R20ao>
 4. Introduction to LockDown Browser: <https://www.youtube.com/watch?v=KDGE2AjhZ5I>
 - a. This video while an older version of the browser shows what the student will experience while taking their exam.
 5. Please visit <https://web.respondus.com/he/monitor/> to learn more about Respondus LockDown Browser and Respondus Monitor.