



2021 Curriculum Alignment Conference

**ADVANCING CURRICULUM
ALIGNMENT PARTNERSHIPS**

Conference Report



UNIVERSITY OF
CENTRAL FLORIDA



CENTRAL FLORIDA
DISTRICT SCHOOLS

CENTRAL FLORIDA REGIONAL
CURRICULUM ALIGNMENT CONFERENCE

FRIDAY, FEBRUARY 26th, 2021
9:00 AM – 2:00PM

PRESENTED VIA ZOOM



2021 Curriculum Alignment Conference:

ADVANCING CURRICULUM ALIGNMENT PARTNERSHIPS

FRIDAY, FEBRUARY 26, 2021

[Zoom](#)

This agenda includes embedded links to the various Zoom sessions. The text in "blue" font includes the link to the main conference Zoom session (above) and a number of breakout opportunities, below.

Agenda:

9:00 a.m.

WELCOME AND OPENING REMARKS

Dr. Amy Locklear, Provost, Daytona State

9:15 a.m.

PANEL PRESENTATION: ALIGNMENT AS A FOUNDATIONAL PIECE FOR TRANSFER STUDENT SUCCESS

Dr. Theodorea Berry, Vice Provost, Division of Student Learning and Academic Success and Dean, College of Undergraduate Studies, UCF

Dr. Carrie Henderson, Executive Vice Chancellor, Florida College System

Dr. Amy Locklear, Provost, Daytona State College

Dr. Laura Ross, Vice President, Academic Affairs, Seminole State College

Dr. Melody Bowdon, Associate Vice Provost, Division of Student Learning and Academic Success and Associate Dean, College of Undergraduate Studies, UCF (Moderator)

9:50 a.m.

CONCURRENT SESSIONS: **SELECT ONE TO ATTEND:**

[Academic Equity](#)

Dr. Rohan Jowallah, Instructional Designer, Center for Distributed Learning, UCF

[Course Sequence Data](#)

Dr. Teresa Dorman, Associate Dean, College of Sciences, UCF

10:50 a.m.

BREAK



UNIVERSITY OF
CENTRAL FLORIDA



CENTRAL FLORIDA
DISTRICT SCHOOLS



UNIVERSITY OF
CENTRAL FLORIDA



CENTRAL FLORIDA
DISTRICT SCHOOLS

11:00 a.m.

CONCURRENT TRACK SESSIONS: SELECT ONE TO ATTEND

Medical College Admission

Dr. Erin Myszkowski, Director, Pre-Health & Pre-Law Advising, UCF

The Faculty Advising Role: Beyond the Courses

Lianna McGowan, Professor of New Student Experience, Valencia College, East Campus

Dr. Mia Pierre-Wall, Professor of New Student Experience, Valencia College, Downtown Campus

Integrating the General Education Program to the Student's Major and Beyond

Dr. Lindsey Neuberger, Associate Professor, Nicholson School of Communications and Media, UCF

Dr. Rosalind Beiler, Associate Professor of History, UCF

11:45 a.m.

RECONVENE & GENERAL ANNOUNCEMENTS

12:00 p.m.

DISCIPLINE BREAKOUTS AND WORKING LUNCH

12:40 p.m.

RECONVENE & INSTRUCTIONS FOR THE FINAL SESSION

12:45 p.m.

CONCURRENT TRACK SESSIONS: SELECT ONE TO ATTEND

Active Learning in an Online Environment

Dr. Kersten Schroeder, Assistant Professor, Biomedical Sciences, UCF

Integrative Learning: The Power of Connecting Two Disciplines for Active Learning and Student Engagement in Online or In-Person Classes

Michael Moniz, Professor of Communication, Valencia College, Downtown Campus

Dr. Melonie Sexton, Professor of Psychology, Valencia College, Downtown Campus

Pre-Major Canvas Course for Transfer Students

Dr. Jeffrey Reinking, Associate Lecturer, Kenneth G. Dixon School of Accounting, UCF

1:30 p.m.

RECONVENE & GENERAL ANNOUNCEMENTS

1:45 pm.

CLOSING REMARKS

Dr. Mark Paugh, Vice President of Academic Affairs, College of Central Florida

The 10th Curriculum Alignment Conference was attended by a total of 128 participants drawn from UCF, six DirectConnect to UCF™ institutions, one participant from FIU and one from Florida Department of Education- Florida College System. This conference was virtual.

WELCOME AND OPENING REMARKS

Opening remarks were provided by Dr. Amy Locklear, Provost, Daytona State College

PANEL PRESENTATION: ALIGNMENT AS A FOUNDATIONAL PIECE FOR TRANSFER STUDENT SUCCESS

This panel discussion focuses on the institutional- and state-level perspectives regarding the need for and benefit of alignment as a foundation for student academic success. The panel specifically discussed the value of alignment in relation to student success.

Panel moderated by Dr. Melody Bowdon, Associate Vice Provost, Division of Student Learning and Academic Success and Associate Dean, College of Undergraduate Studies, UCF.

The panelists include senior academic affairs leadership at the state colleges, UCF, and Florida College Schools. They were:

- Dr. Carrie Henderson, Executive Vice Chancellor, Florida College System
- Dr. Theodorea Berry, Vice Provost, Division of Student Learning and Academic Success and Dean, College of Undergraduate Studies, UCF
- Dr. Amy Locklear, Provost, Office of Academic Affairs, Daytona State College
- Dr. Laura Ross, Vice President, Academic Affairs, Seminole State College

CONCURRENT SESSIONS:

Participants were invited to select a session to attend.

Academic Equity: Creating a Framework for Inclusion in the Online Learning Environment

Dr. Rohan Jowallah, Instructional Designer, Center for Distributed Learning, UCF

This session will brought together approaches for enhancing inclusion in the design, development, and delivery of online courses. The presenter will also shared a few practices on how to incorporate inclusion in an online course.

[Link to Presentation in MSTeams](#)

[Link to Presentation in Appendix](#)

Course Sequence Data: New Dashboard in MS Teams

Dr. Teresa Dorman, Associate Dean, College of Sciences, UCF

A demonstration and discussion of the data available in the Course Sequence Dashboard that is now accessed in Microsoft TEAMS. Includes examples of sequence data from several disciplines.

[Link to Presentation in MSTeams](#)

[Link to Presentation in Appendix](#)

CONCURRENT TRACK SESSIONS

Participants were invited to select a session to attend.

Medical School Admission & Community/ State College Science Courses

Dr. Erin Myszkowski, Director, Pre-Health & Pre-Law Advising, UCF

This presentation reviewed key components to advising Pre-Health students and also discussed the topic of science prerequisite courses required by health professional schools and whether these science prerequisite courses can/should be taken at a four-year college or university or at a two-year state/community college.

[Link to Presentation in MSTeams](#)

[Link to Presentation in Appendix](#)

The Benefits of an Informed and Effective Faculty Advising System

Lianna McGowan, Professor of New Student Experience, Valencia College, East Campus

Dr. Mia Pierre-Wall, Professor of New Student Experience, Valencia College, Downtown Campus

This presentation focused on the faculty advising role in a front door student success course, SLS 1122: New Student Experience (NSE) and an overview of the partnership with student affairs for advising-specific credentialing and a professional development program. Faculty advisors in the NSE course are integral to student retention, degree completion, and transfer rate.

[Link to Presentation in MSTeams](#)

[Link to Presentation in Appendix](#)

Integrating the General Education Program to the Student's Major and Beyond

Dr. Melody Bowdon, Associate Vice Provost, Division of Student Learning and Academic Success, UCF

Dr. Rosalind Beiler, Associate Professor of History, UCF

Dr. Lindsey Neuberger, Associate Professor, Nicholson School of Communications and Media, UCF

This presentation provided an overview of UCF's GEP Refresh and the quality enhancement plan (QEP) on integrative learning. The goal is Integrative Learning Foundations within the GEP, where the student thinks about connections between courses, their major and their academic goals; and faculty think about learning outcomes and the ability to apply what learned to real world principles.

[Link to Presentation in MSTeams](#)

[Link to Presentation in Appendix](#)

DISCIPLINE BREAKOUTS AND WORKING LUNCH

A working lunch during which faculty joined their peers in their respective breakout rooms to engage in discussions around topics such as remote teaching challenges and opportunities, impact of alignment on upper-level course preparation, and emerging topics and concerns.

CONCURRENT TRACK SESSIONS

Participants were invited to select a session to attend.

Active Learning in an Online Environment: Innovations and Opportunities to Courses Using Online Instruction

Dr. Kersten Schroeder, Assistant Professor, Biomedical Sciences, UCF

A discussion of how teaching in an online environment has opened new doors to performing different active learning exercises with students in upper-level courses. These courses engage students in case-based learning, problem-based learning, game-based learning, and escape rooms.

[Link to Presentation in MSTeams](#)

[Link to Presentation in Appendix](#)

Due to technical difficulties, this presentation was not offered.

Integrative Learning: The Power of Connecting Two Disciplines for Active Learning and Student Engagement in Online or In-Person Classes

Michael Moniz, Professor of Communication, Valencia College, Downtown Campus

Dr. Melonie Sexton, Professor of Psychology, Valencia College, Downtown Campus

Students take courses as a step in a process. It is common that each course appears as a single experience with no relation to another course or to real world application. Valencia College Downtown has created an integrated lesson approach that allows students to see how two courses connect within a topic, their career, their lives and with bigger social issues in the world. This approach was successful in first-to-first classes but was also used in innovative ways through the online environment. The process is all about creating an active learning experience for the students which engages them in the learning of topics, their lives and social issues. This presentation focused on the concept and how it was applied in the online learning environment with great success.

Pre-Major Transfer (Non-Credit) Webcourses

Dr. Jeffrey Reinking, Associate Lecturer, Kenneth G. Dixon School of Accounting, UCF

This session will present the Canvas non-credit course that the Dixon School of Accounting at UCF developed for the Pre-Accounting Majors (native and transfer). Students are automatically enrolled, and the course provides information that acclimates students to the Accounting Major. As of Fall 2020, 1,074 students were enrolled and had access to this Canvas course.

[Link to Presentation in MSTeams](#)

[Link to Presentation in Appendix](#)

CLOSING REMARKS

Closing remarks were provided by Dr. Allan Danuff, Associate Vice President, Arts and Sciences, College of Central Florida on behalf of Dr. Mark Paugh, Vice President of Academic Affairs, College of Central Florida.

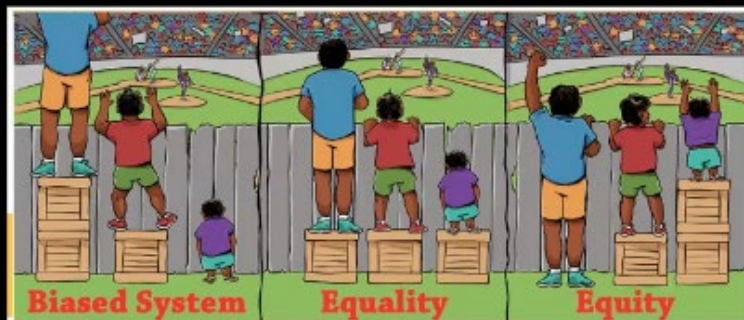
A list of attendees is found in [Appendix 2](#).

APPENDIX 1: Presentations

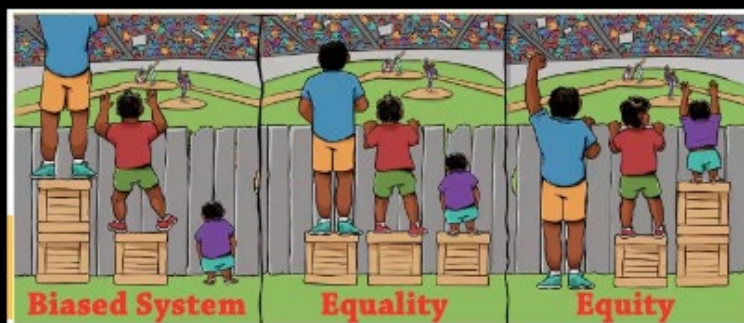
Academic Equity

Dr. Rohan Jowallah, Instructional Designer, Center for Distributed Learning, UCF

Academic Equity:
Creating a
Framework for
Inclusion in the
Online Learning
Environment



What is
Equity?





This Photo by Unknown Author is licensed under [CC BY-SA](#)

Our present Context

Why address equity?

(Discussion/Possible
Examples).

Reduce	Reduce achievement gaps
Address	Address gender gaps in STEM
Reflect/Audit	Reflect/Audit policies that will limit or hinder low-income students to progress
Build	Build a community of practice.
Practice	Practice Inclusive Teaching

Inclusive Teaching

Developing self-awareness

Consider classroom climate

Consider your instructional choices carefully

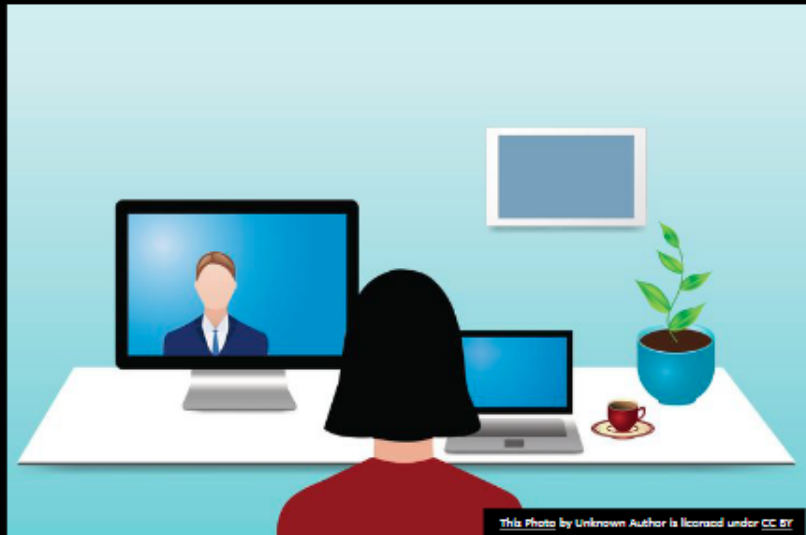
Foster a sense of belonging

Promote engagement and independent learning

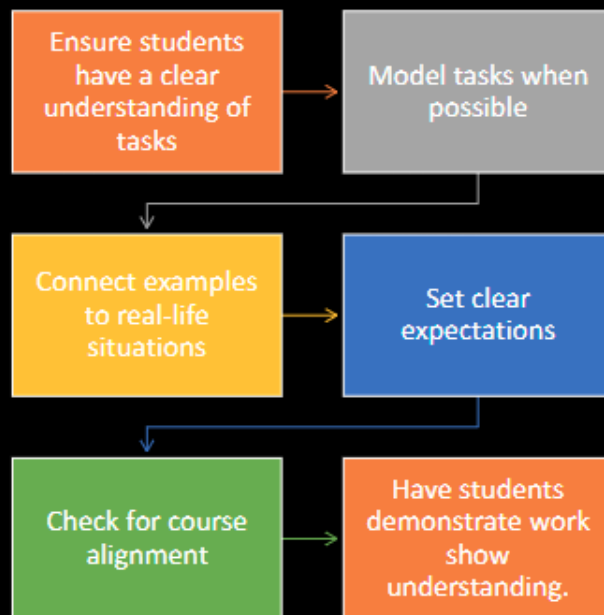
Strategies for Enhancing Equity



1. Be transparent in your instructional approaches and expectations.



1. Strategies for Transparent Instructional Approaches










2. Design courses using the principles of universal design for learning to maximize educational opportunity.



Accessibility



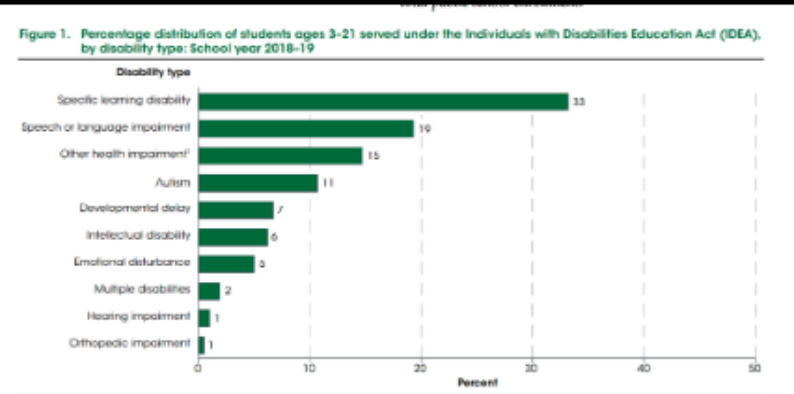
T	H	R	I	V	E	S
Tables	Hyperlinks	Recordings	Inclusive Font	Visuals	Examine	Structure
						
Provide table descriptions and add column and row headers .	Use descriptive hyperlinks informing the user where a link will take them.	Provide a transcript for video / audio content and add closed captions on videos.	Use accessible Sans Serif fonts optimised for digital display.	Add alt text to all images. For more detailed visuals provide a description.	Use built-in Accessibility Checkers to check for issues, e.g. colour contrast ratios.	Use heading styles , lists and left justified text in all documents.

Digital Accessibility UK

3. Knowing the profiles of your student population



Figure 1. Percentage distribution of students ages 3–21 served under the Individuals with Disabilities Education Act (IDEA), by disability type: School year 2018–19



Navigating the support system



This Photo by Unknown Author is licensed under CC BY-SA

4. One-to-one office hours



Inclusive office hours (Online/Face-to-face)



REACH OUT TO STUDENT



MIA STUDENTS



NOT MEETING
COURSE LEARNING
OUTCOME



CREATE FLEXIBLE
MEETING TIMES



USE TECHNOLOGY TO
OFFER SUPPORT AND
EXPLAIN IDEAS



INVITE STUDENTS TO
FORWARD
QUESTIONS BEFORE
MEETING .



SET UP A BOOKING PAGE IN
(WEBCOURSES)

5. Provide multiple options for students to demonstrate their knowledge.



This Photo by Unknown Author is licensed under CC BY

4. Online assessments to reflect students' preferences.

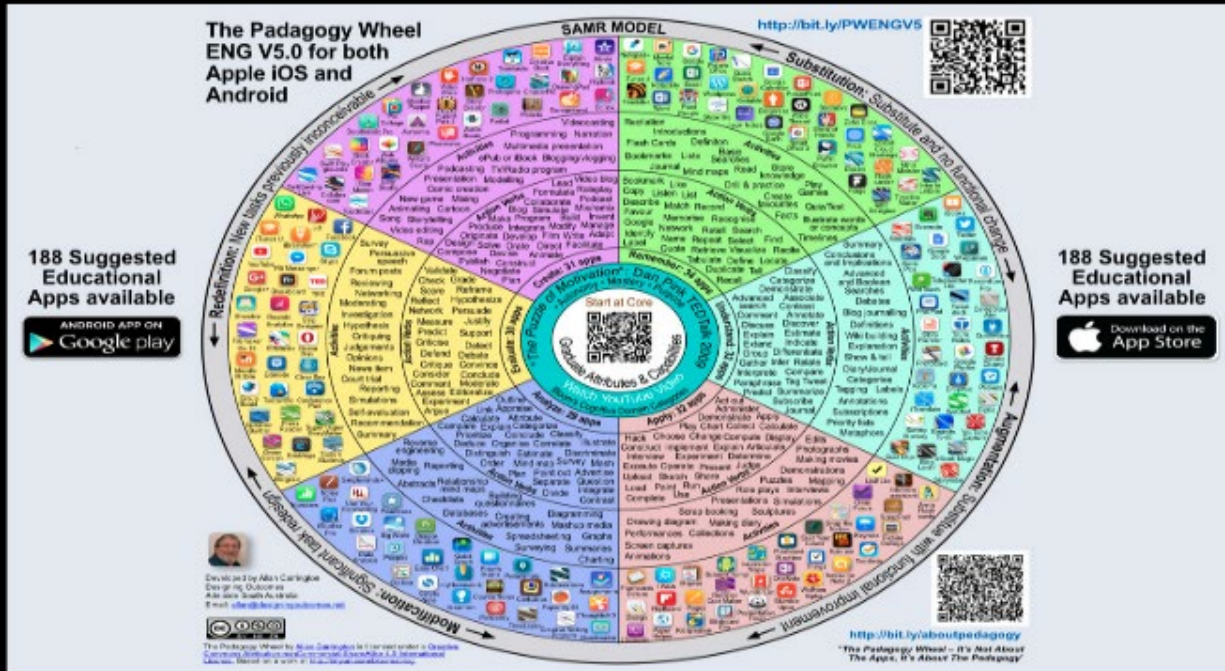
	Formative	Summative
When?	Before or during instruction	The end of instruction
Why?	Guide in planning & improving instruction, to improve learning	Inform & assess the level of accomplishment toward LO

This Photo by Unknown Author is licensed under CC BY-NC-ND



Diversity Assessments





6. Provide the framework for collaborative group projects to enhance students' learning experience.



Inclusive group work (Outline the process)

Inform	Take	Set up	Explain
Inform students of the need diversity the group.	Take proactive action if groups are not showing diversity in relation to gender, race, ethnicity, and, disabilities.	Set up protocols for group behavior	Explain the benefits the group work to your discipline.

7. Have high an expectation for all students regardless of their background.





Fostering High Expectations

- Convey confidence in your students.
- Let students know that you believe in them and speak positively about students to other staff.
- Give opportunities for students to contribute
- Give specific feedback.
- Provide high levels of support
- Have a “No student left behind” approach.

Equitable engagement

- Random response
- Provide challenging questions to all students
- Provide a protocol for engagement
- Seek varied perspectives on concepts
- Consider religious holidays
- Be mindful of your language use and possible generalization.
- Check for questions/feedback (online)



This Photo by Unknown Author is licensed under CC BY

What Does It Mean to Be Equity-Minded?

- Willingness to look at student outcomes and disparities
- Recognition that individual students are not responsible for the unequal outcomes of groups
- Respect for the aspirations and struggles
- Fairness
- Elimination of entrenched biases, stereotypes, and discrimination

Theory and Practice



A Success Story- HBCU



Group Discussion

Question

What would equity goals look like in your department?



Q&A

This Photo by Unknown Author is licensed under CC BY-SA

References

- Adelman, H., & Taylor, L. (2017). *Addressing Barriers to Learning: In the Classroom and Schoolwide*. Online Submission.
- Cepin, J., & Naimi, K. (2015). (Non)Construction of the Teacher: An Inquiry into Ontario's Equity and Inclusive Education Strategy. *Alberta Journal of Educational Research*, 61(1), 65–79.
- Kelly, C. A. (2002). Creating equitable classroom climates: An investigation of classroom strategies in mathematics and science instruction for developing preservice teachers' use of democratic social values. *Child Study Journal*, 32(1), 39–52

Thank You!
Rohan.Jowallah@ucf.edu



Course Sequence Data

Dr. Teresa Dorman, Associate Dean, College of Sciences, UCF



Course Sequence Data

New Dashboard in MS Teams

Dr. Teresa Dorman
Associate Dean, College of Sciences



Accessing the Dashboard – MS Teams

Do you currently use MS Teams?

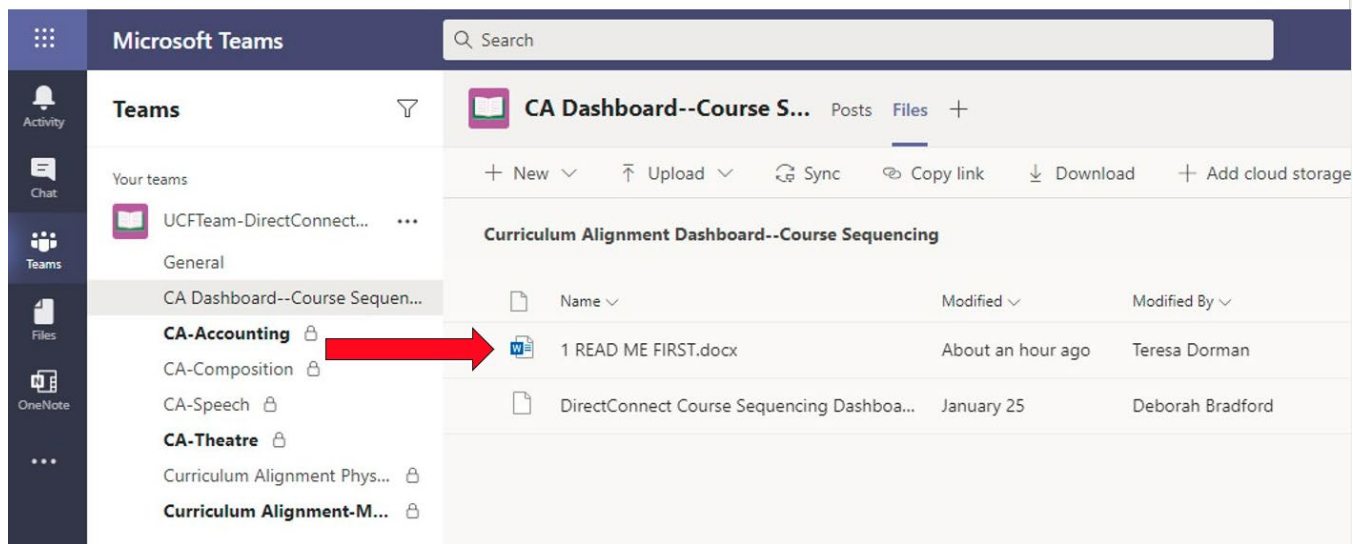
- Using your Zoom reactions (found either on the screen you're looking at or under "participants") answer "YES" or "NO"

Guest Accounts (for nonUCF Access)

- Requires Azure based Multi-Factor Authentication (MFA)
- "UCF Guest Access MFA" document in chat



Accessing the Dashboard



“1 READ ME FIRST” document in chat

Excerpt from “READ ME FIRST”

Permission and Additional Information:

- Notify us if you intend to share these data – we want to ensure you know how to correctly read and interpret the results
- Notify [Dr. Pat Ramsey](#) with UCF’s IKM before sharing outside of the DirectConnect to UCF® partner institutions

Ethical Use of these Data:

- Many factors positively/ negatively impact student success
- **Not intended:**
 - to imply that these data predict or determine a student's ability to perform and/or succeed
 - to indicate the quality of instruction at a given institution

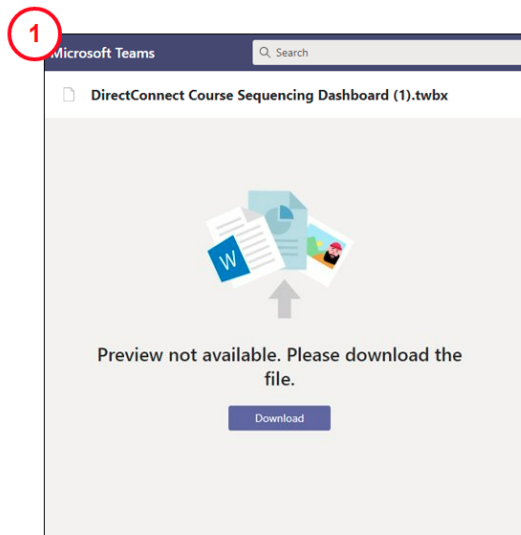
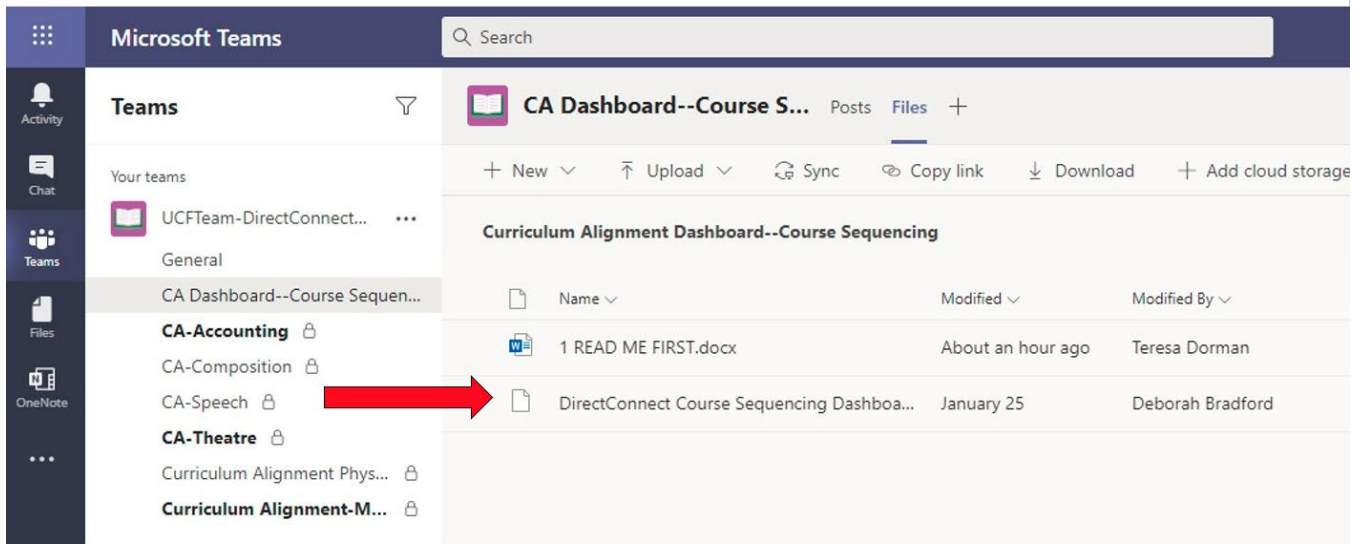


Examining these data, we must acknowledge:

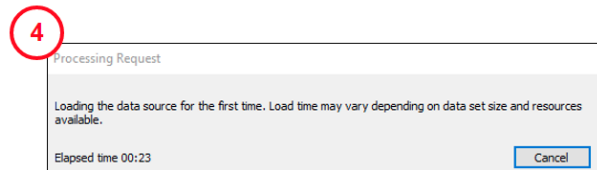
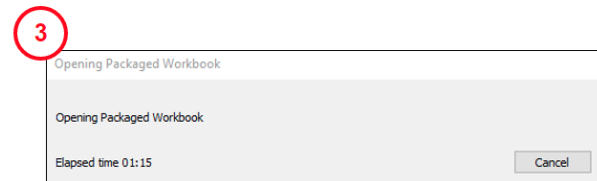
- Institutional Missions
- Performance Metrics
- Admissions Protocol
- Use (or not) of Placement Tests
- Environmental Differences
- Internal Curriculum Alignment (dept/inst)



Downloading the Dashboard

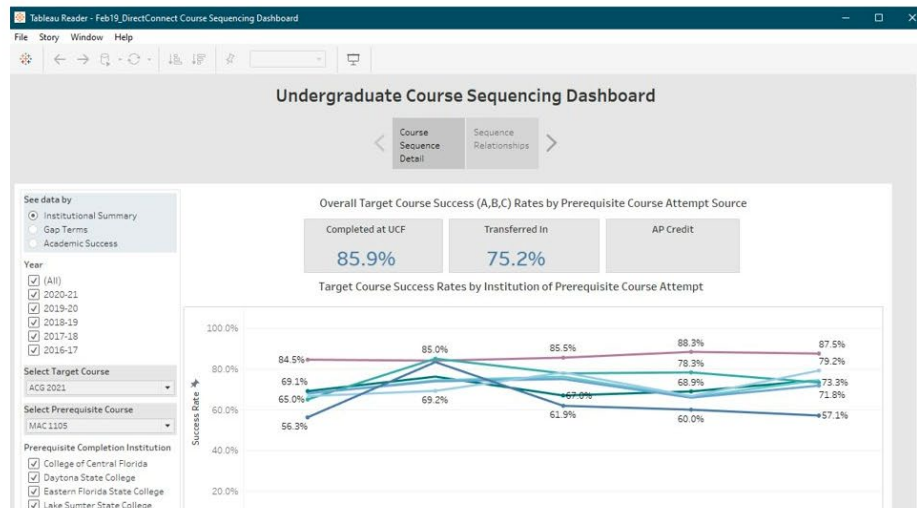


The file will (most likely) be located in your "Downloads" folder.



Course Sequence Detail

Detailed analyses of course sequences



Introducing the Dashboard

The dashboard interface includes the following sections:

- See data by:**
 - ☒ Institutional Summary
 - ☐ Gap Terms
 - ☐ Academic Success
- Year:**
 - ☐ (All)
 - ☐ 2020-21
 - ☒ 2019-20
 - ☒ 2018-19
 - ☒ 2017-18
 - ☐ 2016-17
- Select Target Course:** PCB 3044
- Select Prerequisite Course:** BSC 2011
- Prerequisite Completion Institution:**
 - ☒ College of Central Florida
 - ☒ Daytona State College
 - ☒ Eastern Florida State College
 - ☒ Lake Sumter State College
 - ☒ Seminole State College of Flor...
 - ☒ Valencia College
 - ☒ UCF
 - ☐ Other FCS
 - ☐ Other
 - ☐ AP

Prerequisite courses do not need to be actual prerequisites, they are courses that provides some foundational knowledge upon which the target course is dependent.

These examples will look at three years of data.



Example Data Sets

Target	Prerequisite
EGN 3310 Statics	PHY 2048 Physics with Calculus I
ACG 2021 Prin. of Financial Acct	MAC 1105 College Algebra
PCB 3044 Ecology	BSC 2011 Biology I

Remember: Target is the course taken after transfer to UCF.
Prerequisite is the course taken at any institution and these are the [Curriculum Alignment courses](#).



Institutional Summary

- Of the students who completed PHY2048 (at either a partner college or UCF), how did they do in EGN3310 at UCF?
- How do partner college attempts at PHY2048 compare to the students who attempted it at UCF?

See data by

☒ Institutional Summary

☐ Gap Terms

☐ Academic Success

Year

☐ (All)

☐ 2020-21

☒ 2019-20

☒ 2018-19

☒ 2017-18

☐ 2016-17

Select Target Course

EGN 3310

Select Prerequisite Course

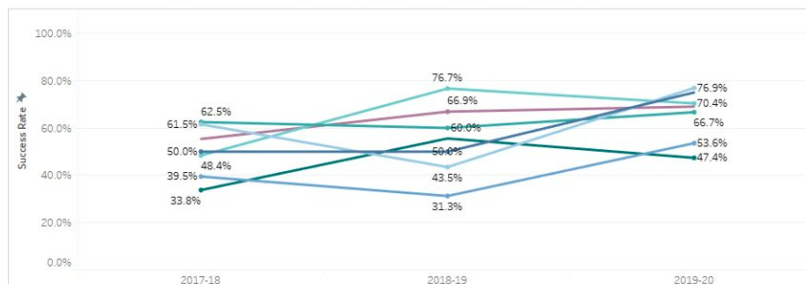
PHY 2048



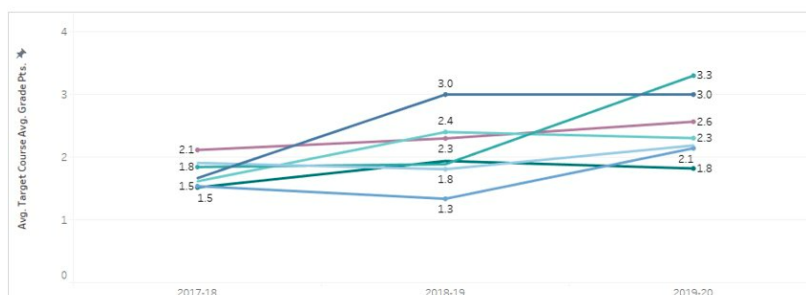
Overall Target Course Success (A,B,C) Rates by Prerequisite Course Attempt Source

Completed at UCF	Transferred In	AP Credit
63.2%	52.2%	88.6%

Target Course Success Rates by Institution of Prerequisite Course Attempt



Student Average Grade Point Performance by Institution of Prerequisite Course Attempt

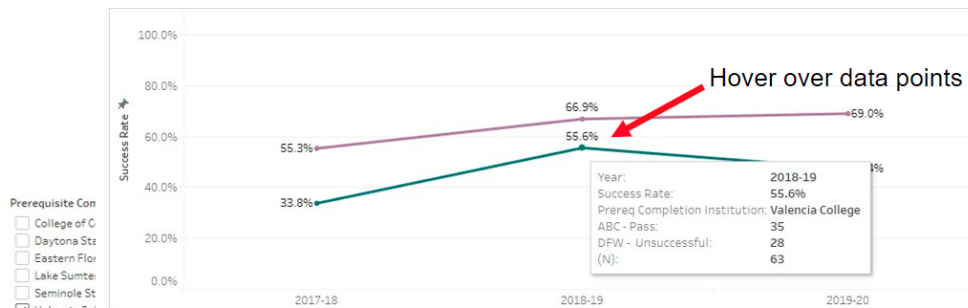


This tells you the overall %success (ABC) in EGN3310 based on whether the PR was completed at UCF, a transfer institution, or (if available) based on AP placement.

This chart tells you the %success (ABC) in EGN3310 at UCF after taking PHY2048 at a specific institution.

This chart tells you the Avg Grade Point in EGN3310 after completing PHY2048.

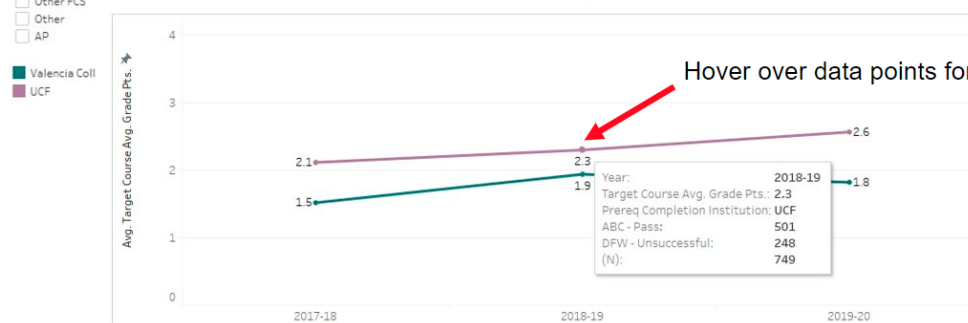
Target Course Success Rates by Institution of Prerequisite Course Attempt



Hover over data points for details:

63 students completed PHY2048 at VC and continued into EGN3310. 55.6% (35) of them were successful (ABC) in EGN3310.

Student Average Grade Point Performance by Institution of Prerequisite Course Attempt



Hover over data points for details:

749 students completed PHY2048 at UCF and had an Average GradePoint of 2.3 in EGN3310

Gap Terms

- What is the gap in time between MAC1150 and ACG2021, and how does this affect performance in ACG2021?

- *This is the “recency” question: How does a gap in time between attempts in the prerequisite and target course impact the target course’s grade?*

See data by

☐ Institutional Summary

☒ Gap Terms

☐ Academic Success

Year

☐ (All)

☐ 2020-21

☒ 2019-20

☒ 2018-19

☒ 2017-18

☐ 2016-17

Select Target Course

ACG 2021

Select Prerequisite Course

MAC 1105

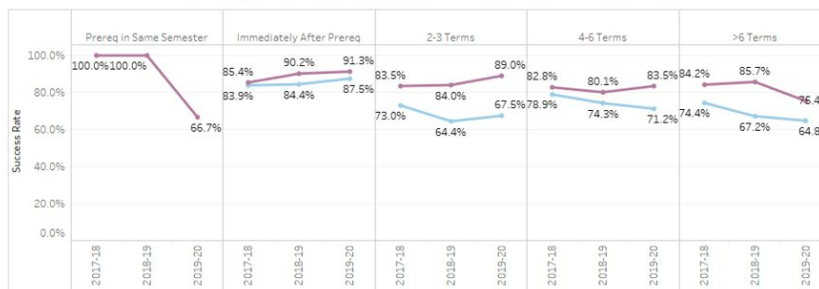


Overall Target Course Success (A,B,C) Rates by Prerequisite Course Attempt Source

Completed at UCF	Transferred In	AP Credit
86.0%	75.9%	

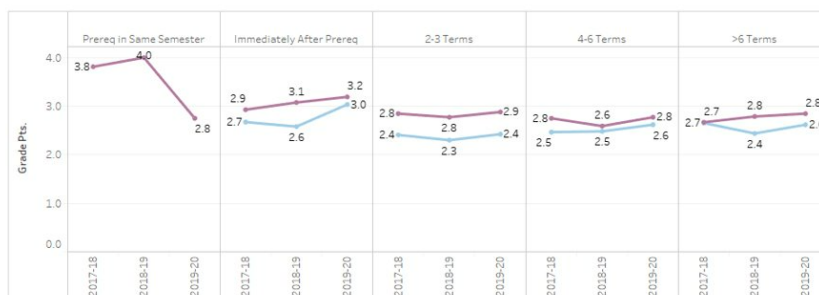
Overall %success (ABC) in ACG2021 based on where PR was completed

Success Rates of Target Course Based on # of Gap Terms Between Prerequisite and Target Course



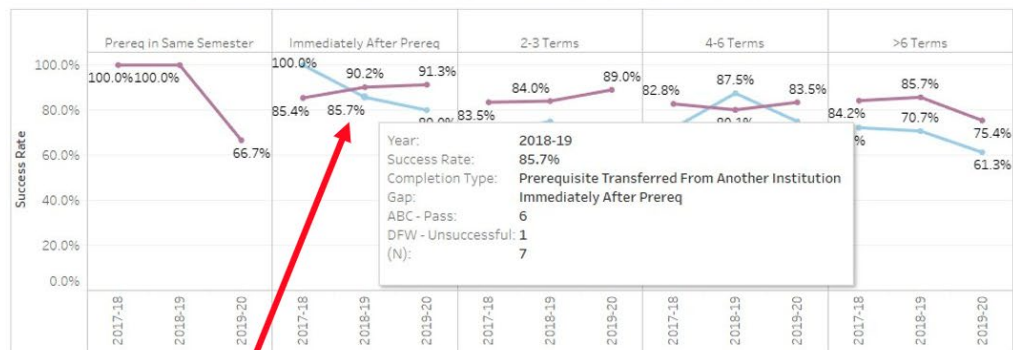
This chart tells you the %success (ABC) in ACG2021 at UCF after taking MAC1105 in same or up to +six terms prior, and whether the PR was attempted at UCF or transferred.

Student Average Grade Point Performance Based on # of Gap Terms Between Prerequisite and Target Course



This chart tells you the Avg Grade Point in ACG2021 after completing MAC1105 in a same or prior term.

Success Rates of Target Course Based on # of Gap Terms Between Prerequisite and Target Course



Prerequisite Completion Ins:

- ☐ College of Central Florid
- ☐ Daytona State College
- ☐ Eastern Florida State C
- ☐ Lake Sumter State Colle
- ☒ Seminole State College
- ☐ Valencia College
- ☒ UCF
- ☐ Other FCS
- ☐ Other
- ☐ AP

- ☒ Prerequisite Attempted
- ☐ Prerequisite Transferred

Hover over data points for details:

7 students who completed MAC1105 at SSC attempted ACG2021 at UCF in the immediate, next semester, and 85.7% (6) were successful (ABC) in ACG2021.

Academic Success

- How successful are students in PCB3044 based on their prerequisite background in BSC2011?
- What does the prerequisite grade in BSC2011 tell me about performance in PCB3044?

See data by

- ☐ Institutional Summary
- ☐ Gap Terms
- ☒ Academic Success

Year

- ☐ (All)
- ☐ 2020-21
- ☒ 2019-20
- ☒ 2018-19
- ☒ 2017-18
- ☐ 2016-17

Select Target Course

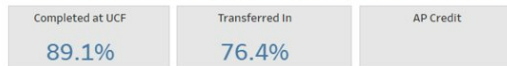
PCB 3044

Select Prerequisite Course

BSC 2011

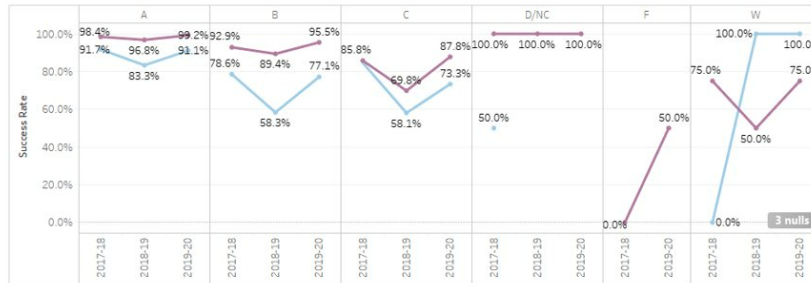


Overall Target Course Success (A,B,C) Rates by Prerequisite Course Attempt Source



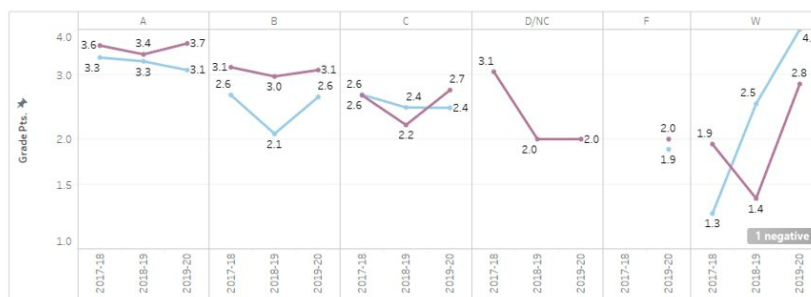
Overall %success (ABC) in PCB3044 based on where PR was completed

Success Rates of Target Course Based on Prerequisite Course Grade



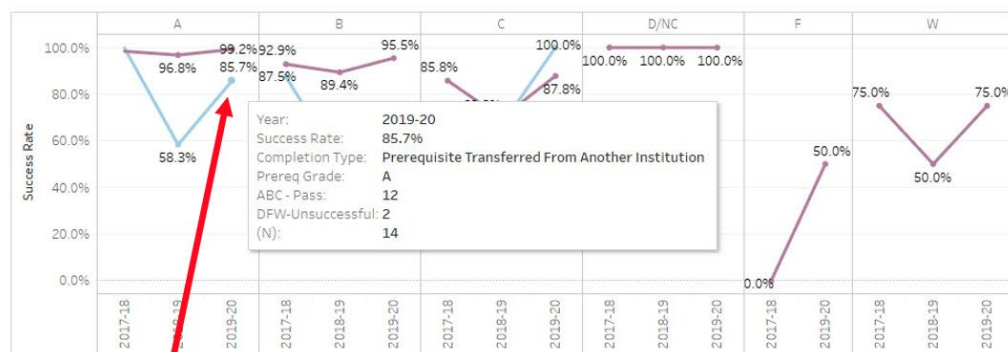
This chart tells you the %success (ABC) in PCB3044 at UCF after completing BSC2011 with a specific grade, and whether the PR was attempted at UCF or transferred.

Student Average Grade Point Performance Based on Prerequisite Course Grade



This chart tells you the Avg Grade Point earned in PCB3044 after completing BSC2011 with a specific letter grade (A, B, C, etc.)

Success Rates of Target Course Based on Prerequisite Course Grade



Prerequisite Completion Institution

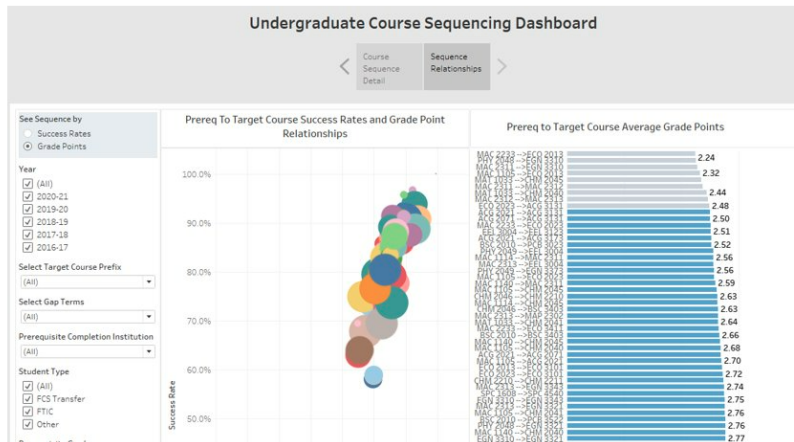
- ☐ College of Central Florida
- ☐ Daytona State College
- ☒ Eastern Florida State College
- ☐ Lake Sumter State College
- ☐ Seminole State College of Flor...
- ☐ Valencia College
- ☒ UCF
- ☐ Other FCS
- ☐ Other
- ☐ AP

■ Prerequisite Attempted at UCF
■ Prerequisite Transferred From ..

Hover over data points for details:

14 students completed BSC2011 at EFSC and earned an "A", and 85.7% (12) were successful (ABC) in PCB3044.

Sequence Relationships



For the data obsessed

A big picture view of **all sequences** with multiple options for filtering the data.

I recommend starting by isolating a **Target Course Prefix**



Filtering options...

See Sequence by
☒ Success Rates
☐ Grade Points

Year
☐ (All)
☐ 2020-21
☒ 2019-20
☒ 2018-19
☒ 2017-18
☐ 2016-17

Select Target Course Prefix
 EGN

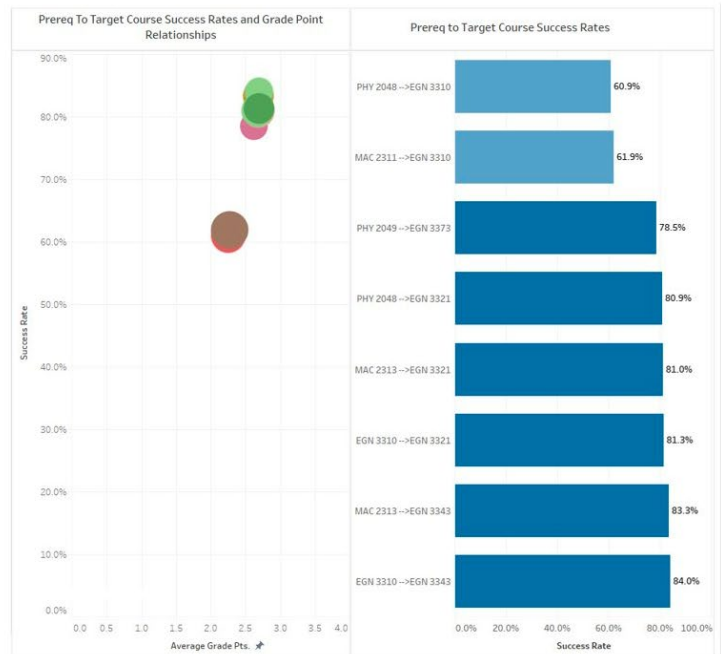
Select Gap Terms
 (All)

Prerequisite Completion Institution
 (All)

Student Type
☒ (All)
☒ FCS Transfer
☒ FTIC
☒ Other

Prerequisite Grade
☒ (All)
☒ A
☒ B
☒ C
☒ D/NC
☒ F
☒ W
☒ AP Grade

Output display:



Q&A

- What additional sequences should be examined?
 - Lower-level course discussed in alignment (or others?)
 - Upper-level course offered at UCF
 - *Direct prerequisite not required!*
- What else?

Medical College Admission

Dr. Erin Myszkowski, Director, Pre-Health & Pre-Law Advising, UCF

Medical School Admissions & Community/State College Science Courses

Erin Myszkowski, Ed.D.
Director



UCF

**Pre-Health and
Pre-Law Advising**

UNIVERSITY OF CENTRAL FLORIDA

Overview

- ▶ Key Components to Advising Pre-Health Students
- ▶ Science Prerequisite Courses – Community/State College or 4-Year University
- ▶ Pre-Health Transfer Student & Current Medical School Applicant – Real Life Example
- ▶ Q&A



Pre-Health Professions



Path to Health Professional Schools

► Skills & Values

► Academics

- Required Courses for Admission (a.k.a. “Prerequisites”)
- GPA (Overall GPA & Science GPA)

► Extracurricular Activities

- Volunteer/Community Service
- Shadowing
- Leadership
- Research



Skills & Values: Pre-Health Preparation

PROS	CONS
Personal Passion	Preparation Time
High Respect-High Pay	High Expectations
Helping Others	Academic Mastery
Many Choices of Major	Rigorous Course Load
Job Outlook	Very Competitive Admission
Altruism	Educational Cost
Impact on the Community	Educational Time
Awesome Responsibilities	Awesome Responsibilities

Reference: C. Klinger, Valencia College



Academics: Pre-Health Preparation

- ▶ **GPA (Overall & Science): 3.5 GPA or higher**
- ▶ **Required Courses for Admission – these will vary by health professional school, but are basically:**
 - ▶ General Biology I & II
 - ▶ General Chemistry I & II
 - ▶ Organic Chemistry I & II
 - ▶ Biochemistry
 - ▶ Physics I & II
 - ▶ Mathematics (College Algebra, Pre-Calculus, Trigonometry, Calculus, Statistics)
- ▶ **Highly Recommended (sometimes required) courses:**
 - ▶ Anatomy, Physiology, Microbiology, Genetics, Social Sciences, Others



Extracurricular Activities: Pre-Health Preparation

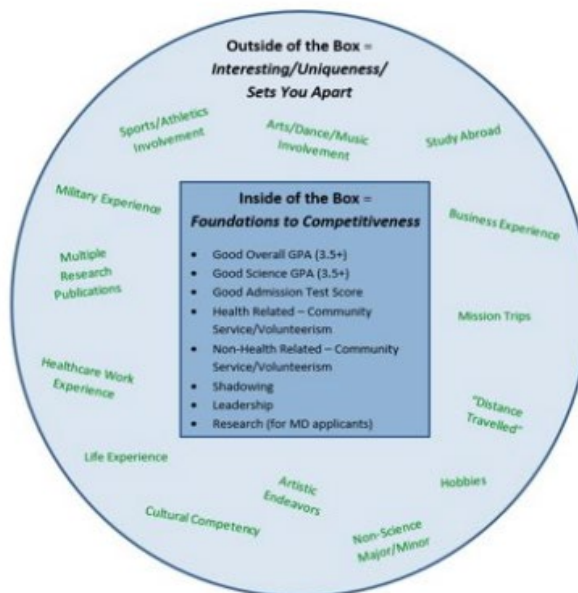
- ▶ **Volunteer/Community Service**
 - ▶ Medical settings & non-medical settings
- ▶ **Shadowing**
 - ▶ Medical professionals in medical settings
 - ▶ Often the *most applicable experience* to your learning and development for health professional school
- ▶ **Leadership**
 - ▶ Often a highly-desirable activity and skill of applicants to health professional school
- ▶ **Research**
 - ▶ Often a highly-desirable activity, skill, and interest of applicants to health professional school



Experiences: Inside & Outside of the Box

WHAT MAKES YOU INTERESTING AND/OR UNIQUE?

You need to be **STRONG** Inside of the Box **AND** have **Some** Outside of the Box Experiences that will make you **Interesting & Unique** from other applicants.



“Admissions officers at 130 medical schools completed the survey”

AAMC Survey: “How important were the following data about academic preparation, experiences, attributes/personal competencies, biographic/demographic characteristics, and interview results in identifying the applicants to [interview, offer an acceptance]?”

Using MCAT Data in 2021 Medical Student Selection



Table 1. Mean Importance Ratings of Academic, Experiential, Demographic, and Interview Data Used by Admissions Committees to Make Decisions About Which Applicants Receive Interview Invitations and Acceptance Offers¹

Mean Importance Ratings ²	Academic Metrics	Experiences	Demographics	Other Data
Highest Importance Ratings (≥ 3.0)	<ul style="list-style-type: none"> GPA; cumulative biology, chemistry, physics, and math MCAT total score GPA; cumulative grade trend GPA; cumulative total GPA; cumulative total from postbaccalaureate premedical program MCAT total score trend Completion of premedical course requirements 	<ul style="list-style-type: none"> Community service/volunteer: medical/clinical Community service/volunteer: not medical/clinical Physician shadowing/clinical observation Leadership 	<ul style="list-style-type: none"> U.S. citizenship/ permanent residency (public)? State residency (public)? Rural/urban, underserved background 	<ul style="list-style-type: none"> Interview results⁴
Medium Importance Ratings (≥ 2.5 and < 3.0)	<ul style="list-style-type: none"> Completion of challenging upper-level science courses GPA; cumulative “all other” (not biology, chemistry, physics, and math) 	<ul style="list-style-type: none"> Paid employment: medical/clinical Research/lab Other extracurricular activities Military service 	<ul style="list-style-type: none"> Race/ethnicity U.S. citizenship/ permanent residency (private)? Parental education/ occupational socioeconomic status (SES) 	
Lowest Importance Ratings (< 2.5)	<ul style="list-style-type: none"> Degree from graduate or professional program Completion of challenging undergraduate courses Selectivity of undergraduate institutions Undergraduate major 	<ul style="list-style-type: none"> Teaching/tutoring/teaching assistant Paid employment: not medical/clinical Intercollegiate athletics Honors, awards, recognitions Conferences attended, presentations, posters, publications 	<ul style="list-style-type: none"> First-generation immigrant status Fluency in multiple languages Gender English language learners State residency (private)? Legacy status Community college attendance Age 	

- Admissions officers at 130 medical schools completed a 2015 AAMC survey on the use and importance of data in admissions decision-making. The survey asked, “How important were the following data about academic preparation, experiences, attributes/personal competencies, biographic/demographic characteristics, and interview results in identifying the applicants to [interview, offer an acceptance]?”
- Importance was rated on a scale ranging from 1 to 4 (“Not important,” “Somewhat important,” “Important,” and “Very important,” respectively). For each variable, we computed an overall mean importance rating based on admissions officers’ ratings of importance for making decisions about whom to interview and whom to accept (the mean importance rating for the interview variable is the exception to this rule because interview data were not available until applicants were invited to interview. We chose to classify variables using overall mean importance ratings because their mean importance ratings were similar for the interview and the acceptance phases. Variables are ordered by overall mean importance rating.
- Overall mean importance ratings for public and private institutions were significantly different from one another.
- Only available at the admissions stage where admissions committees make a decision to offer an acceptance.



Next, “the elephant”

Taking prerequisite science courses at community/state colleges and four-year universities



“I’m right there in the room, and no one even acknowledges me.”



UCF Stance – Written in July 2014

► UCF Contributors:

- Erin Myszkowski, Director, Pre-Health and Pre-Law Advising
- Amanda Colee, Director of Student Services and Advising, Burnett School of Biomedical Sciences/College of Medicine
- Lee Anne Kirkpatrick, Director, College of Sciences Advising Services
- Mike Hampton, Former Director, Interdisciplinary Studies, and Professor of Chemistry
- Pam Cavanaugh, Associate Vice Provost, UCF Regional Campuses



Pre-Health Students Transferring to UCF with an A.A. Degree from a Community/State College: Health Professional School Course Recommendations

- **Q: Can Pre-Health students take science courses at community/state colleges?**

- **A: YES! But, Be Strategic.**

See: <https://phpladvising.ucf.edu/pre-health/transfer-students/recommendations/>



Page 1 – found online on UCF PHPL Advising website on our Pre-Health Transfer Students Recommendations page.

<https://phpladvising.ucf.edu/pre-health/transfer-students/recommendations/>

Pre-Health Students Transferring to UCF
with an A.A. Degree from a Community/State College:
Health Professional School Course Recommendations

UCF Pre-Health and
Pre-Law Advising

Q: Can Pre-Health students take science courses at community/state colleges?

A: YES! But, Be Strategic.

If a Pre-Health student takes science courses at a community/state college, after transferring to a four-year university, they must:

- Continue to earn very good grades in science courses at the four-year university (Don't let grades dip after transferring)
- Get a high score on their health professional school admissions test (ex. MCAT [for medical school] or DAT [for dental school])
- Stay at the four-year university for courses after transferring there (Don't return as a transient student back to a community/state college)

Grades must be very strong at the community/state college and continue to be very strong at the four-year university to be a competitive applicant for health professional schools such as medical schools or dental schools.

Important Tips

1) Mastery of upper-level science courses proves mastery of lower-level science courses. If Pre-Health students complete science courses at a community/state college, the health professional schools – medical and dental schools in particular – like to see advanced coursework in the sciences at a four-year college/university. Very good grades in science courses at both levels are key and of utmost importance.

2) If students must complete all or most of the lower-level science prerequisite courses at a community/state college, select a science-heavy major to complete at UCF.

Many health professional schools – medical and dental schools in particular – urge students to take as many science courses as possible at a four-year university (see Florida medical schools' policies and preferences on 2nd page). If a student must complete all or most of the lower-level science prerequisite courses at a community/state college, they must then prove academic mastery of that content by completing and excelling in a science-heavy major at the university level. The best way to prove academic preparedness to health professional schools and to alleviate their possible concern about lower-level science coursework is to earn almost all "A" grades in heavy course loads of a rigorous science major at the university level. (Note: Completing the "A" grades in the upper level courses of a rigorous science major with a strong admissions test score [ex. MCAT, DAT, PCAT, etc.] alleviates even more possible concern by health professional schools about academic preparedness for their programs.)

NOTE: It is ultimately up to each student to decide where to take which courses. Ask a Pre-Health Advisor for assistance to make the best decision for you based on your circumstances.

~Make Informed Decisions About Your Coursework~

*A student transfer health professional schools may require that all courses be completed at a four-year university.
Pre-Health and Pre-Law Advising (PHPL Advising)
Travis Colburn Hall, Suite 355 / Phone: 407-623-0191
Email: phpladvising@ucf.edu / Web: www.phpladvising.ucf.edu

Rev. 8/21



Page 2 – found online on UCF PHPL Advising website on our Pre-Health Transfer Students Recommendations page.

<https://phpladvising.ucf.edu/pre-health/transfer-students/recommendations/>

Pre-Health Students Transferring to UCF
with an A.A. Degree from a Community/State College:
Health Professional School Course Recommendations

UCF Pre-Health and
Pre-Law Advising

Important Tips (continued)

3) "Selectivity of the undergraduate institution" where applicants take courses is a factor considered by many health professional schools, but it is not a primary factor.

According to a survey of medical school admissions officers, GPA, Science GPA, Total MCAT scores, Letters of Recommendation, and Medically-Related Volunteerism are the top five ranked factors considered when evaluating applicants to offer a medical school interview. "Selectivity of the undergraduate institution" is a very low ranked factor considered, but it is still a factor that is considered.

Florida Medical Schools' Policies & Preferences on Community/State College Courses

Medical School	Policy or Preference on Community/State College Courses
Florida Atlantic University	Website: Q: Can prerequisite lower division courses be taken at community colleges? A: Yes. However, additional upper level science courses are encouraged and expected in preparation for the MCAT and success in medical school. (http://med.fau.edu/admissions/faq.php) MSAR: All required/recommended coursework is accepted from community college except Biochemistry and Genetics.
Florida International University	Website: Q: Can prerequisite lower division courses be taken at community colleges? A: Yes. However, additional upper level science courses are encouraged in preparation for the MCAT and success in medical school. (http://med.fiu.edu/pre-health/advising/pre-health/academic/pre-requisites.html) MSAR: All required/recommended coursework is accepted from a community college.
Florida State University	Website: We prefer applicants to take pre-requisite courses in a traditional classroom setting at a four-year college. However, we recognize that this is not always possible, especially for non-traditional applicants, so course credit from a US-accredited institution is acceptable in most cases. (http://med.fsu.edu/pre-health/pre-requisites) Advanced Placement, CLEP, and dual enrollment credits fulfill the course requirements. However, courses taken in a traditional classroom at a four-year institution are considered to be more academically competitive. (http://med.fsu.edu/pre-health/pre-requisites/pre-requisites) MSAR: All required/recommended coursework is accepted from a community college.
University of Central Florida	The UCF College of Medicine does not have a policy prohibiting applicants from taking courses online or at a community college. Academic performance is one of many factors considered through the holistic review of an application. Whenever possible, a student should choose the most rigorous possible academic preparation. (http://med.ucf.edu/admissions/application-requirements) MSAR: All required/recommended coursework is accepted from a community college.
University of Florida	Website: Q: Can I take the prerequisite courses at my local community/state college? A: Yes. Keep in mind that in order to create the most academically competitive application it is helpful to demonstrate success in at least some science coursework completed at the most competitive bachelor's degree granting institution where you can gain entrance. (http://admissions.med.ufl.edu/faq/faq-pre-requisites) MSAR: All required/recommended coursework is accepted from a community college except Biochemistry.
University of Miami	Website: It is expected that the major portion of required science courses will be taken at the senior college level. An application that presents only a junior college academic record will not be considered. (http://admissions.med.miami.edu/ucf-pre-health/pre-requisites) MSAR: All required/recommended coursework taken at a community college will be viewed on a case-by-case basis.
University of South Florida	Website: Q: Can I take all of my premed courses at a junior college? A: In order to create the most academically competitive application you should take at prerequisite courses at the most competitive bachelor degree granting institution where you can gain entrance. You should take your pre-requisite courses from your degree granting institution. However, if you started your academic career at a junior college those courses are acceptable for completion of the pre-requisites. In this case you are encouraged to take additional science courses at a bachelor degree granting institution. (http://health.usf.edu/med/pre-health/pre-requisites/pre-requisites) MSAR: All required/recommended coursework is accepted from a community college.

*Admission consideration for the competitive medical school requires that the Medical School admission Requirements (MSAR) be completed.
Pre-Health and Pre-Law Advising (PHPL Advising)
Travis Colburn Hall, Suite 355 / Phone: 407-623-0191
Email: phpladvising@ucf.edu / Web: www.phpladvising.ucf.edu

Rev. 8/21



Context Matters! - Student Scenarios

- ▶ **Student #1:** A premedical student started her college education at a community college and is working on completing her AA degree. While earning her AA degree, she takes some Biology, Chemistry, and Math courses at her community college and prior to transferring to a four-year university.

Traditional A.A.
degree transfer
student



- ▶ **Student #2:** A premedical student is a Biology major at a four-year university. He is taking Organic Chemistry I at his four-year university, but he is struggling in it and earns a “D”, so he chooses to retake it during the next semester at a nearby community college.

Four-year
university student
taking science
courses transient



Context Matters! - Student Scenarios

- ▶ **Student #3:** A high school student plans to be “Pre-Med” when she gets to college and is advanced in her courses in high school. Therefore, she takes some Biology and Math courses as a dual enrollment student at her local community college.

High school dual
enrollment student



- ▶ **Student #4:** A college graduate with a bachelor’s degree in English has been in the workforce for a few years, but now wants to go back to college to become a physician. He learns that he must first complete the medical school prerequisite courses in order to apply to medical school, so he begins completing the prerequisite courses at a nearby community college.

Post-baccalaureate
student



UCF Pre-Health Transfer Student & Current Medical School Applicant

Daytona State College		FICE:	001475			
Course	Title	Earned	Grade	Typ	Points	
2014 Summer Semester						
MAC 1105	COLLEGE ALGEBRA	3.00	A		12.00	
2014 Fall Semester						
ENC 1101	INTRODUCTION TO COMP	3.00	B		9.00	
MAC 1140	PRE CALCULUS ALGEBRA	3.00	B		9.00	
2015 Spring Semester						
AMH 2020	UNITED STATES HISTOR	3.00	A		12.00	
MAC 1114	COLLEGE TRIGONOMETRY	3.00	B		9.00	
SFC 2608	ORAL COMMUNICATION	3.00	A		12.00	
2015 Summer Semester						
AMH 2010	UNITED STATES HISTORY TO 1877	3.00	B		9.00	
2015 Fall Semester						
MAC 2311	CALCULUS I	3.00	C+		6.75	
HUN 1201	HUMAN NUTRITION	3.00	B		9.00	
MAC 2311L	CALCULUS I LAB	1.00	C+		2.25	
2016 Spring Semester						
ENC 1102	WRITING WITH RESEARCH	3.00	C		6.00	
ECO 2013	PRINCIPLES OF MACRO	3.00	B+		9.75	
2016 Fall Semester						
CHM 1025C	INTRODUCTION TO CHEMISTRY AND	4.00	A		16.00	
BSC 1010C	GENERAL BIOLOGY I	4.00	A		16.00	
MUS 2380	POPULAR MUSIC IN AME	3.00	A		12.00	
STA 2023	ELEMENTARY STATISTIC	3.00	A		12.00	
2017 Spring Semester						
BSC 1011C	GENERAL BIOLOGY II (FOR SCIENC	4.00	A		16.00	
CHM 1045C	GENERAL COLLEGE CHEM	4.00	A		16.00	
2017 Summer Semester						
CHM 1046C	GENERAL COLLEGE CHEMISTRY II	4.00	A		16.00	
School Totals		Attempt	Earned	Points	GPA	
		60.00	60.00	209.75	3.496	
Totals		Attempt	Earned	Points	GPA	
		60.00	60.00	209.75	3.496	



UCF Pre-Health Transfer Student & Current Medical School Applicant

Daytona State College		FICE:	001475			
09/12/2017		Associate of Arts				
		With Honors				
----- Beginning of UCF Undergraduate Record						
Course	Title	Attempt	Earned	Grade From To	Typ	Points
Fall 2017 (08/21/2017 to 12/09/2017)						
Junior		Biology BS		Appointment Window: 03/24/2017 01:50 PM		
Catalog Year		Fall 2017				
CHM 2210	0001 ORGANIC CHEMISTRY I	3.00	3.00	B		9.000
MCB 3020C	0001 GENERAL MICROBIOLOGY	5.00	5.00	A		20.000
PCB 3044	0001 PRINCIPLES OF ECOLOG	3.00	3.00	A		12.000
PCB 3063	0001 GENETICS	3.00	3.00	A		12.000
Totals for GPA		Attempt	Earned	Points	GPA	
Term / UCF Cumulative		14.00	14.00	53.0	3.786	
Term Honors: Dean's List						
Spring 2018 (01/08/2018 to 05/01/2018)						
Junior		Biology BS		Appointment Window: 1/07/2017 08:00 PM		
Catalog Year		Fall 2017				
CHM 2211	0001 ORGANIC CHEMISTRY II	3.00	3.00	B		9.000
PCB 3233	0002 IMMUNOLOGY	3.00	3.00	A		12.000
PCB 3233L	0014 IMMUNOLOGY LABORATOR	1.00	1.00	A		4.000
PCB 4483	0001 EVOLUTIONARY BIOLOGY	4.00	0.00	W		
Withdrawn 03/21/2018						
PCB 4483L	0011 EVOLUTIONARY BIOLOGY	1.00	0.00	W		
Withdrawn 03/21/2018						
Totals for GPA		Attempt	Earned	Points	GPA	
Term		7.00	7.00	25.0	3.571	
UCF Cumulative		21.00	21.00	78.0	3.714	
Summer 2018 (05/14/2018 to 08/03/2018)						
Seniors		Biology BS		Appointment Window: 3/28/2018 03:00 PM		
Catalog Year		Fall 2017				
BOT 3902	0001 ETHNOBOTANY	3.00	3.00	A		12.000
Totals for GPA		Attempt	Earned	Points	GPA	
Term		3.00	3.00	12.0	4.000	
UCF Cumulative		24.00	24.00	90.0	3.750	
Fall 2018 (08/20/2018 to 12/08/2018)						
Seniors		Biology BS		Appointment Window: 3/28/2018 03:00 PM		
Catalog Year		Fall 2017				
BCH 4053	0001 BIOCHEMISTRY I	3.00	3.00	A		12.000
CHM 2211L	0019 ORGANIC LAB TECHNIQ	2.00	2.00	A		8.000
PCB 3023	0001 MOLECULAR CELL BIOLOG	3.00	3.00	A		12.000
PCB 4483	0001 EVOLUTIONARY BIOLOGY	4.00	4.00	A		16.000
PCB 4483L	0011 EVOLUTIONARY BIOLOGY	1.00	1.00	A		4.000
Totals for GPA		Attempt	Earned	Points	GPA	
Term		13.00	13.00	52.00	4.000	
UCF Cumulative		37.00	37.00	142.00	3.838	



UCF Pre-Health Transfer Student & Current Medical School Applicant

Course	Title	Attempt	Earned	Grade	Type	Points
Spring 2019 (01/07/2019 to 04/30/2019)						
Senior	Biology BS	Appointment Window: 03/28/2018 03:00 PM				
Catalog Year	Fall 2017					
DEP 2004	0M57 DEVELOPMENTAL PSYCHO	3.00	3.00	A		12,000
EXP 3204	0M59 SENSATION AND PERCEP	4.00	4.00	A		16,000
MCR 4940	0001 METHODOLOGY BIOMED S	1.00*	1.00	S		4,000
ZOO 4603C	0001 EMNARYOLOGY/DEVELOPME	5.00	5.00	A		20,000
Totals for GPA		Attempt	Earned	Points	GPA	
Term		12.00	12.00	48.0	4.000	
UCF Cumulative		49.00	49.00	196.0	3.878	
Term Honors: President's Honor Roll Certificate						
Summer 2019 (05/13/2019 to 08/02/2019)						
Senior	Biology BS	Appointment Window: 09/25/2019 10:00 AM				
Catalog Year	Fall 2017					
PCB 4723	0001 ANIMAL PHYSIOLOGY	4.00	4.00	A		16,000
SOP 3723	0M60 CROSS CULTURAL PSYCH	3.00	3.00	A		12,000
Totals for GPA		Attempt	Earned	Points	GPA	
Term		7.00	7.00	28.0	4.000	
UCF Cumulative		56.00	56.00	218.0	3.893	
Term Honors: President's Honor Roll Certificate						
Fall 2019 (08/26/2019 to 12/11/2019)						
Senior	Biology BS	Appointment Window: 09/25/2019 10:00 AM				
Catalog Year	Fall 2017	Filed Intent to Graduate				
NOT 4850	0001 MEDICAL BOTANY	3.00	3.00	A		12,000
HSC 3537	0M64 MEDICAL TERMINOLOGY	3.00	3.00	A		12,000
MCR 4940	0011 METHODOLOGY BIOMED S	0.00*	0.00*	S		4,000
PHY 2053C	0005 COLLEGE PHYSICS I	4.00	4.00	A		16,000
PSY 3204C	0M60 STAT METHODS IN PSYC	4.00	4.00	A		16,000
Totals for GPA		Attempt	Earned	Points	GPA	
Term		14.00	14.00	56.0	4.000	
UCF Cumulative		70.00	70.00	274.0	3.914	
Term Honors: President's Honor Roll Certificate						
Spring 2020 (01/06/2020 to 04/27/2020)						
Senior	Biology BS	Appointment Window: 09/25/2019 10:00 AM				
Catalog Year	Fall 2017	Degree Awarded				
EXP 3404	0M61 COGNITIVE PSYCHOLOGY	3.00	3.00	A-		11,200
FTL 2030	0M61 HISTORY OF MOTION PI	3.00	3.00	A		12,000
PHY 2054C	0005 COLLEGE PHYSICS II	4.00	4.00	B		12,000
SOP 3004	0M61 SOCIAL PSYCHOLOGY	3.00	3.00	A		12,000
Totals for GPA		Attempt	Earned	Points	GPA	
Term		13.00	13.00	47.25	3.678	
UCF Cumulative		83.00	83.00	321.25	3.878	



UCF Pre-Health Transfer Student & Current Medical School Applicant

Transfer Credits for GPA	60.00	60.00	209.75	3.496
Overall for GPA	143.00	143.00	531.00	3.713
* Total Credit Accepted Including Not for GPA : 157.00				

Guess how many medical school (MD & DO) interview offers he currently has?

21!!!

MD School Interviews: 10 (UCF, USF, FAU, Miami, Nova, Temple, Drexel, Wayne State, Medical College of Wisconsin, and Virginia Commonwealth)

DO School Interviews: 11 (PCOM, Touro-NY, LECOM-Bradenton, KCUCOM, New York Institute of Technology, A.T. Still, Des Moines, Midwestern-Chicago, Nova, Incarnate Word, and Michigan State)

He has multiple MD and DO school acceptances and counting!



UCF Pre-Health Advisors

▶ UCF Pre-Health Advising on taking Science Prerequisite Courses at Community/State Colleges:

- ▶ We are **Individualized** in our advising; we are NOT prescriptive in our advising
 - ▶ We really try to get to know our students and help them make the best decision based on their individual life situation (ex. finances, proximity, work/class schedules, other hardships, etc.)
- ▶ We are **Evidenced-Based** with students when we can be
- ▶ We are the “Middle men/women” between the health professional schools and the Pre-Health students



OFFICE OF PRE-HEALTH AND PRE-LAW ADVISING

Trevor Colbourn Hall, Suite 205

Phone: 407-823-0101

Email: phpladvising@ucf.edu

Dr. Erin Myszkowski, Director

Kimberly Finley, Academic Advisor IV

Chauntrice Riley-Stanford, Academic Advisor III

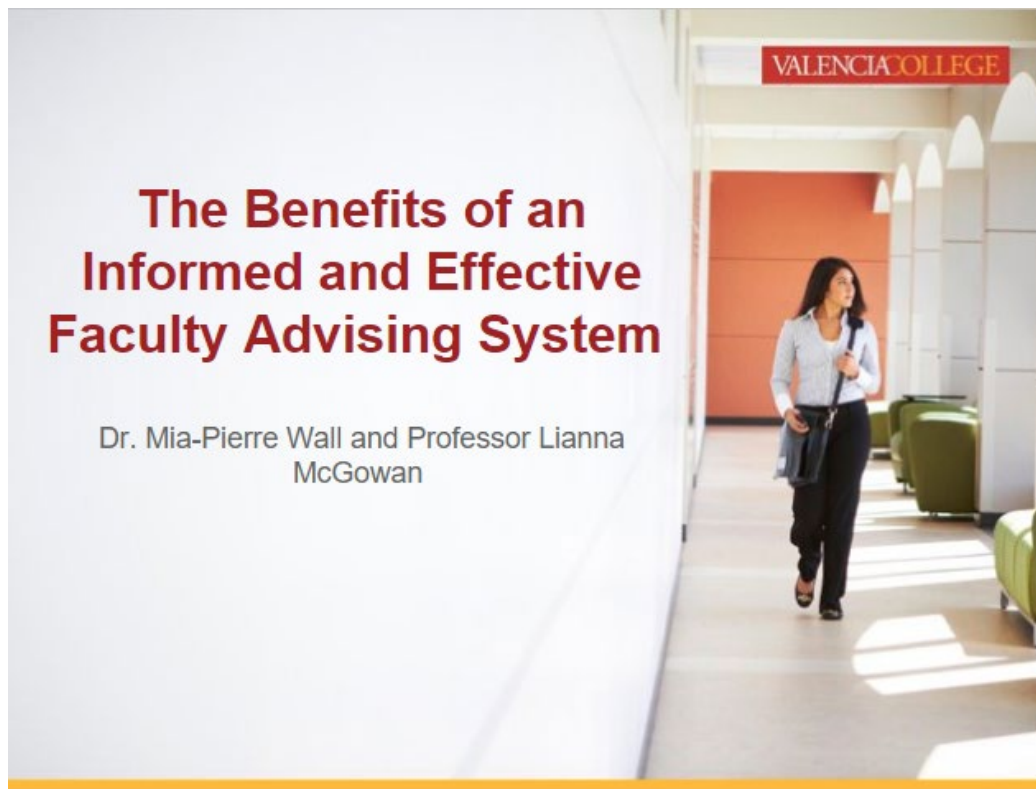
Brittany Cunnien, Academic Advisor II

Courtney Martinez, Academic Advisor I



The Faculty Advising Role: Beyond the Courses

Lianna McGowan, Professor of New Student Experience, Valencia College, East Campus



The Benefits of an Informed and Effective Faculty Advising System

Dr. Mia-Pierre Wall and Professor Lianna
McGowan

VALENCIA COLLEGE

Advising Research

Faculty will assist in the advising process in order for students to have a connection with an advisor on a one-to-one basis. O'Banion (1972) noted, "There are problems, too, with an instructor academic advising system. Often the program of academic advising is poorly conceived and coordinated; instructors are left to fend for themselves" (p. 14). When this is done without support or training, the students can suffer (O'Banion, 1972). Therefore, faculty-advising training is needed to educate faculty advisors.

Campbell and Nutt (2008) noted, "When viewed as an educational process and done well, academic advising plays a critical role in connecting students with learning opportunities to foster and support their engagement, success, and attainment of learning outcomes"

Community colleges are increasingly a favorable financial option for students pursuing higher education (Staley, 2010). As the community college option becomes more attractive, more students are seeking to take their education to this level as they begin their academic career beyond high school.

Faculty Advising and Community College

- Faculty members at 4 year colleges and universities advise students as part of their responsibility
- In contrast at community colleges, few faculty members are required or trained to advise students (Pierre, 2017)
- At the time of my study, I was able to identify that Denver Community College was one of a few that had faculty as advisors.....



Faculty Credentialing & Training Annual Appointed Faculty

Credentialing Parameters for SLS Discipline

- Minimum Requirements: master's degree and LFMP7200, New Student Experience (NSE) Credentialing Training
- Training process in summer from student services
- Understanding curriculum
- Engagement Hours in contract
- Purposeful office hours



Faculty Credentialing & Training

Part-time Faculty

Credentialing Parameters for SLS Discipline

- Minimum Requirements: master's degree and LFMP7200, New Student Experience (NSE) Credentialing Training

Contract

- 2 hours advising responsibility per 3 credit course
 - compensated apart from credit hour payment
 - 3 sections of SLS 1122 / 9 credits/ 6 advising hours per week

Engagement Hours

- Course load: 3 classes maximum contract due to advising responsibility

Communication and Structure

- syllabus statement included in department checklist
- use of online scheduling tool
- recommended advising session topics with discussion topics
 - Session 1: Building Rapport and Career Exploration
 - Session 2: Choosing a Major and Course Selection



SLS 1122: New Student Experience Course

- required general education course for all A.A and A.S. degrees at Valencia
- added to college catalog in 2015

Area 1. Communications

Required Courses - There are a required 12 credits. The Freshman Composition courses must be completed with a minimum grade of C to fulfill the Gordon Rule Requirement

Freshman Composition I

ENC 1101	FRESHMAN COMPOSITION I **~	3
or ENC 1101H	Freshman Comp I Honors	

Freshman Composition II

ENC 1102	Freshman Comp II **~	3
or ENC 1102H	Freshman Comp II-Honors	

Select one of the following Oral Communication courses:

SPC 1608	FUNDAMENTALS OF SPEECH ~	3
SPC 1608H	Fundamentals of Speech- Honors ~	
SPC 1917	Interpersonal Communication ~	
SPC 1917H	Interpersonal Comm - Honors ~	

New Student Experience

SLS 1122	New Student Experience ~	3
or SLS 1122H	NEW STUDENT EXPERIENCE-HONORS	

Total Credit Hours

12



Curriculum Alignment

Course Learning Outcome

Students will design an education plan that includes goals for learning and a financial plan.

Corresponding Evidence of Learning

Develop an academic plan that includes all admission requirements and courses needed to earn their selected degree at Valencia and effectively prepare for transfer (if applicable).

- Course curriculum outline submitted to college committee for approval and approved via quorum vote. Recently updated February 19, 2021.



Curriculum Alignment

Critical Thinking: General Education Outcome Indicator

Students will design an education plan that includes goals for learning and a financial plan

Academic Blueprint: Artifact for College-Wide Assessment

Grading Rubric

© NSE-TermByTerm-CT-V1

What do I need? Complete a term-by-term academic plan where student included all courses required for degree/program. SLO: Developed an education plan that includes all courses needed to earn their selected degree at Valencia GE: A3 Critical Thinking- Use of Evidence

threshold: 1.0 pts

2 pts

Excellent -
This information is used for data collection and does not impact your grade

1 pts

Satisfactory -
This information is used for data collection and does not impact your grade

0 pts

Developing -
This information is used for data collection and does not impact your grade

--



Sample Assignment

Section 2: Term-By-Term Plan

How to complete this section: Indicate if your program has Common Program Prerequisites. Then, plan the remaining classes required for your degree at Valencia, including all necessary pre-requisites for your current (or future) program, using your Degree Audit and Program Requirements. Start by filling in the classes you are enrolled in for the current semester. Then, move to the next term box and:

- Under the **Courses** column, type the course prefix and number for the course you want to take (ex. ENC 1101, not English Comp). Do not include junior level (3000) and senior level (4000) courses).
- Include the **Credit Hours** for each course and then **total the credit hours** for the term at the bottom of the column

Current semester: Fall 2020

Course	Credit Hours
SLS 1122	3
ENC 1101	3
SPC 1608	3
BSW 1000	3
Enter course prefix & #	Enter credit hours
Total Credit Hours:	12

Term & Year: Fall 2021

Course	Credit Hours
HUN 1202	3
POS 2041	3
BSW 2022	3
SPN 1120	4
Enter course prefix & #	Enter credit hours
Total Credit Hours:	13

Term & Year: Spring 2021

Course	Credit Hours
ENC 1102	3
MGF 1106	3
BSW 1020	3
Enter course prefix & #	Enter credit hours
Enter course prefix & #	Enter credit hours
Total Credit Hours:	9

Term & Year: Spring 2022

Course	Credit Hours
EVR 1001	3
BSW 2024	3
SPN 1121	4
Enter course prefix & #	Enter credit hours
Enter course prefix & #	Enter credit hours
Total Credit Hours:	10

Term & Year: Summer 2021

Course	Credit Hours
HUM 1020	3
STA 2023	3
Enter course prefix & #	Enter credit hours
Enter course prefix & #	Enter credit hours
Enter course prefix & #	Enter credit hours
Total Credit Hours:	6

Term & Year: Summer 2022

Course	Credit Hours
EUH 2000	3
BSW 2941	3
Enter course prefix & #	Enter credit hours
Enter course prefix & #	Enter credit hours
Enter course prefix & #	Enter credit hours
Total Credit Hours:	6



Questions?



Works Cited

Campbell, S. M., & Nutt, C. L. (2008). Academic advising in the new global century: Supporting student engagement and learning outcomes achievement. *Peer Review*, 10(1), 4-7. Retrieved from http://www.aacu.org/peerreview/pr-wi08/pr-wi08_acadv.cfm

O'Banion, T. (1972). An academic advising model. *Junior College Journal*, 42. Retrieved from

Pierre, M. A. (2015). *Increasing the Effectiveness of a Faculty Advising Program: Impact on Students and Faculty*. Applied Dissertation Nova Southeastern University.

Staley, C. (2010). *Focus on community college success*. Boston, MA: Wadsworth Cengage Learning.

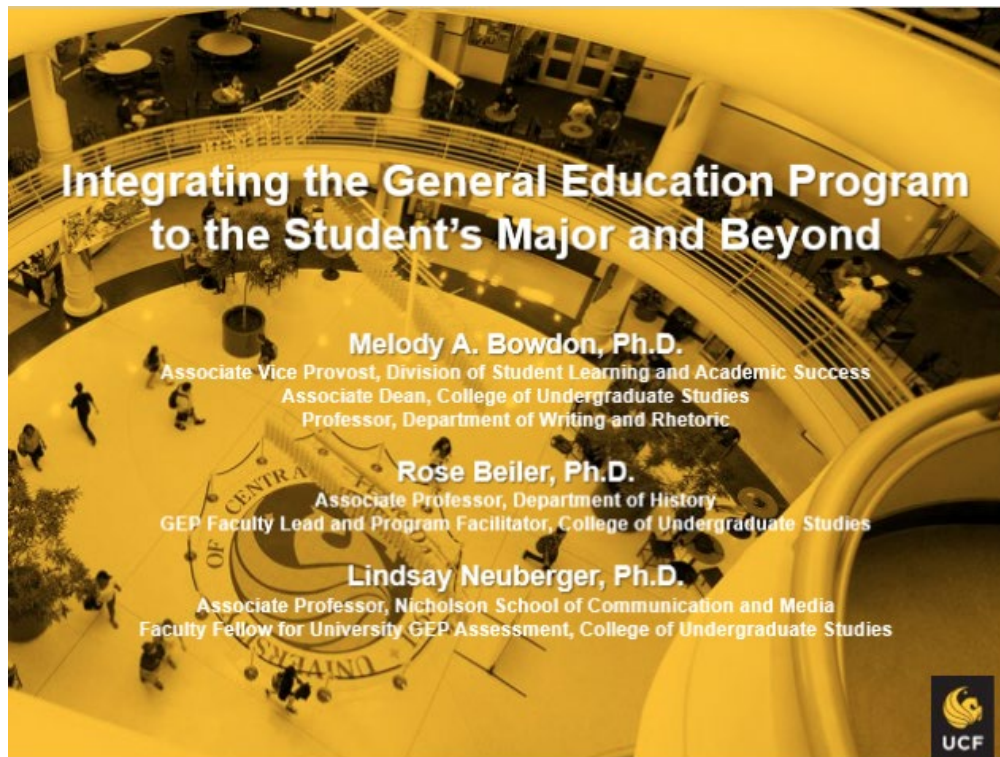


Integrating the General Education Program to the Student's Major and Beyond

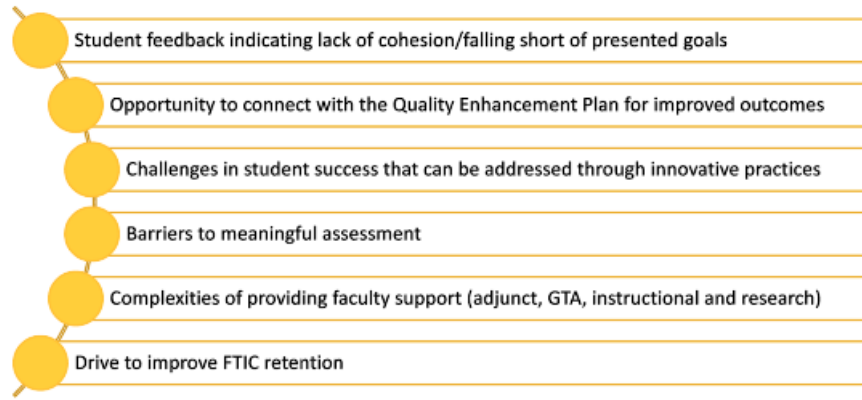
Dr. Lindsey Neuberger, Associate Professor, Nicholson School of Communications and Media, UCF

Dr. Rosalind Beiler, Associate Professor of History, UCF

Dr. Melody Bowdon, Associate Vice Provost, Division of Student Learning and Academic Success



Motivations for Refresh



Key Elements of our Process

- Engagement
- Methodical progression
- Faculty development
- Broad and deep faculty leadership
- Community building
- Meaningful assessment



GEP Revision



Updated GEP Approach

- Integrative
- Provides students with a coherent experience
- Streamlined and more meaningful assessment
- Promotes a GEP community
- Fosters faculty collaboration and support



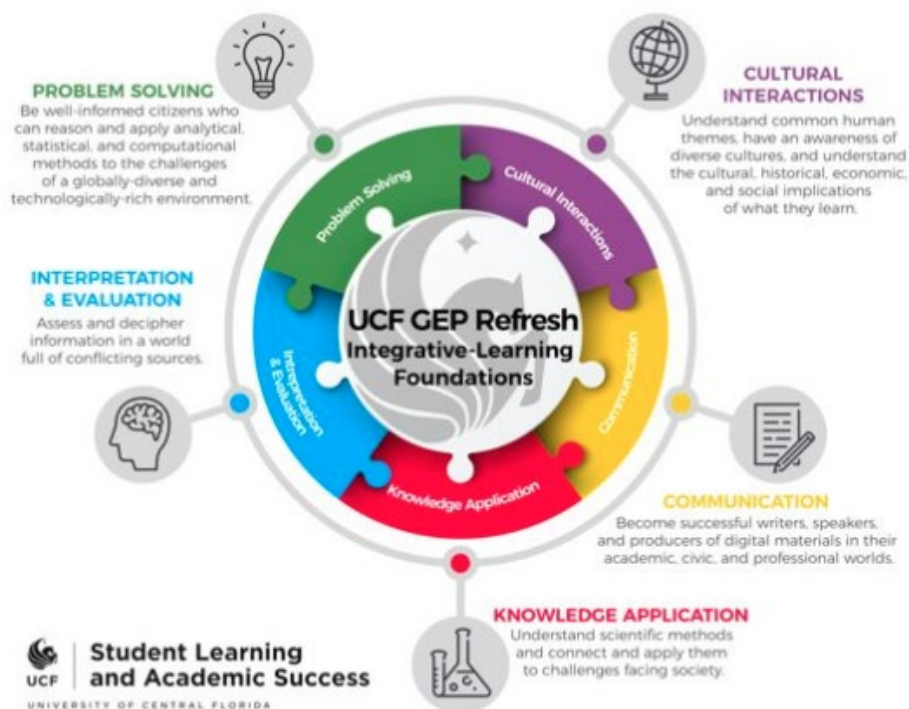
The purposes of the UCF General Education Program (GEP) are to introduce students to a broad range of human knowledge and intellectual pursuits, to equip them with the analytic and expressive skills required to engage in those pursuits, to develop their ability to think critically, and to prepare them for life-long learning. The GEP curriculum provides students with the intellectual, ethical, and aesthetic foundations necessary to make informed choices; to accept the responsibilities of working and living n a rapidly changing world; and to lead a productive and satisfying life.



1. State Core: Take one state core course per foundation (black heading), for a total of 5 state core classes.
2. GEP Groups: Take one course per GEP group (grey heading), for a total of 12 classes.
3. Gordon Rule: Take four GEPs (ENC1101, ENC1102, and 2 more from GEP 4/5/6) and two GEPs (from GEP 7 & 8).

2020-2021 General Education Program

COMMUNICATION FOUNDATION		MATHEMATICAL FOUNDATION		SCIENCE FOUNDATION	
GEP 1 and GEP 2 are required for all majors GEP 1. ENC 1101 English Composition I (3CR) GEP 2. ENC 1102 English Comp. II (3CR)		GEP 6 - choose one class to complete Consider Gordon Rule Writing (WRG) & State Core Requirements (SC) for GEP 6.		GEP 11 - choose one class to complete	
GEP 3 - choose one class to complete COM 1000 Introduction to Communication SPC 1600C Fund. of Technical Presentations SPC 1600 Fund. of Oral Communication		GEP 7 - choose one class to complete MATH 1100C College Algebra (3CR) MATH 1100C Trigonometry (3CR) MATH 1100C Pre-Calculus (3CR) MATH 2110C Calc. w/ Analytic Geom. I (3CR) MATH 1100C Math (3CR) MATH 1107 Explorations in Mathematics (3CR)		AST 2002 Astronomy (3CR) CHEM 1020 Concepts in Chemistry (3CR) CHEM 1020 General Chemistry (3CR) CHEM 2040 Chemistry Fundamentals IA (3CR) <u>and</u> CHEM 2041 Chemistry Fundamentals IB (3CR) CHEM 2040C Chemistry Fund. I (3CR) CHEM 2040C Chemistry Fund. II (3CR) PHY 1020 Physics of Energy, Climate Change, Env. PHY 2020 Concepts of Physics PHY 2020C College Physics I (3CR) PHY 2020C College Physics II (3CR) PHY 2040C Gen. Physics using Calc I (3CR) PSC 1121 Physical Science (3CR)	
HISTORICAL & CULTURAL FOUNDATION GEP 4 - choose one class to complete AMH 2010 U.S. History: 1480-1877 (3CR) CUN 2000 Western Civilization I (3CR) CUN 2001 Western Civilization II (3CR) HUM 2020 Surveying the Humanities HUM 2210 Humanities Textbook I (3CR) HUM 2230 Humanities Textbook II (3CR) WOH 2012 World Civilization I (3CR) WOH 2022 World Civilization II (3CR)		GEP 8 - choose one class to complete COS 1000C Introduction to Computers (3CR) COS 2100C Computer Fund. for Business (3CR) COS 2000C Concepts in Computer Science (3CR) COS 3000C Computer Science I (3CR) COS 3000C Computer Science II (3CR) STA 2014C Principles of Statistics (3CR) STA 2023 Statistical Methods I (3CR) STA 2023 Probability & Stats. for Eng. (3CR)		GEP 12 - choose one class to complete ANT 2011 The Human Species BSC 1005 Biological Principles BSC 1005 Biology and Environment BSC 2010C Biology I (3CR) EVR 1001 Intro to Environmental Science GEO 1000 Physical Geography GEO 2010 Resources Geography GLY 1030 Geology and Its Applications GLY 2030 Environmental Geoscience WCB 1210 Intro. to Biotechnology & Genetic Eng. WET 2104 The Earth's Climate	
GEP 5 - choose one class to complete ANT 2010 Cultural Anthropology ARH 2000 History of Western Art I ARH 2001 History of Western Art II FIL 1000 Chinese Survey FIL 2020 History of Western Philosophy FIL 2020 Film History I (3CR) FIL 2027 Film History II (3CR) LIT 2110 World Literature I (3CR) LIT 2120 World Literature II (3CR) MUH 2017 Survey of Music MUH 2019 Amer. Pop. Music 1940's-Present MUS 2010 Equipment of Music (3CR) MUS 2010 Evolution of Jazz MUS 2010 Music of the World PHY 2010 Introduction to Philosophy REL 2000 World Religions THE 2000 Theatre Survey (3CR)		SOCIAL FOUNDATION GEP 9 - choose one class to complete ANT 2006 General Anthropology HSA 2117 Civic Engagement in the US healthcare PST 2012 General Psychology SYG 2006 Introduction to Sociology		GEP 10 - choose one class to complete AMH 2020 U.S. History: 1877-Present (3CR) (CU) ECO 2013 Principles of Microeconomics ECO 2023 Principles of Macroeconomics POS 2041 American National Government (CU)	



The UCF Integrative GEP

- prepares students to broaden and deepen their understanding of common human themes; to develop an awareness of diverse cultures; and understand the cultural, historical, economic, and social implications of what they learn
- prepares students to be successful writers, speakers, and producers of digital materials in academic, civic, and professional contexts
- provides students with a deep understanding of scientific methods and enables them to connect and apply those methods to challenges facing society
- prepares students to be well-informed citizens who can reason and can apply analytical, statistical, and computational methods to the challenges of a globally-diverse and technologically-rich environment
- prepares students to assess and decipher information in a world full of conflicting sources

The Color Coding System

Cultural Interactions
Communication
Knowledge Application
Evaluation/Interpretation
Problem Solving

AMH 2020
Evaluation/Interpretation
Cultural and Historical
Communication

ANT 2511
Cultural and Historical
Knowledge Application
Problem Solving

BSC 2010C
Knowledge Application
Problem Solving
Communication

MAC 2311C
Problem Solving
Knowledge Application

ENC 1101
Communication
Cultural and Historical
Evaluation/Interpretation



Previous Assessment Models

- Unit by unit/Course by course
- Very little integration/coordination within foundations
- Almost no reaching across foundations
- Sometimes felt a little like checking boxes



New GEP Assessment Guiding Goals

- 1) Establish intra-foundation standardization (i.e., identifying benchmarks within foundations that cut across the diverse disciplines and courses represented)
 - Working intra-foundation to find common threads, distinct operationalization
- 2) Increase inter-foundation collaboration (i.e., work to identify, codify, and implement secondary foundation integration)
 - Working inter-foundation to increase integration
- 3) Create a streamlined/functional/meaningful/integrative GEP assessment structure that is realistic
 - Develop and implement these new assessment processes



Communication Foundation

Students who complete requirements for the Communication foundation will be able to:

- Comprehend, use, and/or apply information for audiences in rhetorically appropriate ways (e.g., sources, ideas, disciplinary content).
- Communicate in rhetorically and stylistically appropriate ways for a range of audiences, purposes, forums, and occasions.
- Conduct and present research in rhetorically appropriate ways.
- Employ communication principles, techniques, or concepts to identify, explain, or address challenges facing society.



Cultural Interactions Foundation

Students who complete requirements for the Cultural Interactions foundation will be able to:

- Identify and discuss themes that are both common and distinct among diverse cultures.
- Analyze and discuss the cultural significance of pieces of art, performances, or texts from diverse aesthetic, historical, and social contexts.
- Compare and interrogate sources of meaning and/or value related to the process of cultural production across social and historical contexts.
- Employ principles, techniques, or concepts associated with the study of cultural interactions to identify, explain, or address challenges facing society.



Knowledge Application Foundation

Students who complete requirements for the Knowledge Application foundation will be able to:

- Characterize a scientific theory as a product of objective evidence and scientific methods.
- Interpret, develop, and use visual representations of data to make and support inferences from scientific observations.
- Identify observational data as the foundation of a scientific argument.
- Employ scientific principles, techniques, or concepts to identify, explain, or address challenges facing society.



Interpretation & Evaluation Foundation

Students who complete requirements for the Interpretation and Evaluation foundation will be able to:

- Demonstrate mastery of discipline specific vocabulary and concepts.
- Recognize social, political, or economic problems and evaluate solutions to those problems.
- Understand how to collect, evaluate, or interpret data to draw conclusions.
- Recognize and interpret the impact of social, economic, and political institutions on the wellbeing of individuals in a country.
- Employ social science principles, techniques, or concepts to identify, explain, or address challenges facing society.



Problem Solving Foundation

Students who complete requirements for the Problem Solving foundation will be able to:

- Interpret posed real world computational, conceptual, or statistical problems.
- Apply learned computational, conceptual, or statistical concepts or skills to solve problems.
- Analyze results of a real world computational, conceptual, or statistical problems.
- Employ problem solving principles, techniques, or concepts to identify, explain, or address challenges facing society.



Course	Learning Outcome 1 Comprehend, use, and/or apply information for audiences in rhetorically appropriate ways (e.g., sources, ideas, disciplinary content).	Learning Outcome 2 Communicate in rhetorically and stylistically appropriate ways for a range of audiences, purposes, forums, and occasions.	Learning Outcome 3 Conduct and present research in rhetorically appropriate ways.	Learning Outcome 4 Employ communication principles, techniques, or concepts to identify, explain, or address challenges facing society.
COM 1000	Exam One Item XX		Application Paper 2	
SPC 1603	Exam One Item XX	Persuasive Speech	Informative Speech	Ceremonial Speech
SPC 1608	Exam One Item XX	Persuasive Speech	Informative Speech	Elevator Pitch Speech
ENC 1101	Application Paper 1			Application Paper 2
ENC 1102		Research Presentation	Research Proposal	Research Proposal



Integrative Assessment

- Allows faculty to individually operationalize learning outcomes in their courses
- Allows for assessment of actual learning, not siloed by disciplines
- Truly measures progress on integrating our curriculum
- Allows us to measure the GEP as an actual PROGRAM – not just a collection of courses



Concluding Thoughts

- Encourage broad input, honest feedback, and authentic collaboration
- Involve students in the process
- (Re)convince faculty of the value and importance of assessment



We are happy to hear any suggestions, answer any questions, and receive any feedback.

Lindsay.Neuberger@ucf.edu

Rosalind.Beiler@ucf.edu

Melody.Bowdon@ucf.edu



Active Learning in an Online Environment

Dr. Kersten Schroeder, Assistant Professor, Biomedical Sciences, UCF



Innovations and opportunities to courses using online instruction

“Active Learning in an Online Environment”

2021 Curriculum Alignment Conference

Kersten Schroeder, Ph.D.

Assistant Professor of Medicine

Burnett School of Biomedical Sciences

College of Medicine

Do you love to lecture like myself?



Popular

Latest

The Atlantic

HEALTH

Is the Lecture Dead?

RICHARD GUNDERMAN JANUARY 29, 2013

The nation's 80,000 medical, 20,000 dental, and 180,000 nursing school students might think that lectures are dead, or at least dying. Health professions curricula increasingly feature small-group, interactive teaching, and successive waves of enthusiasm have arisen for laptops, PDAs, and tablet computers as the new paradigms of learning. Commentators frequently single out the lecture as the prototypically old school, obsolete learning technology, in comparison to which newer educational techniques offer interactive, customized, and self-paced learning alternatives.

This is no arcane academic matter. The LCME, the organization that accredits US medical schools, strictly limits the number of hours per week students may spend in lectures. So seriously does the organization take this mandate that, in October of 2011, it placed one of Texas's medical schools on probation, in part because its curriculum relied too heavily on "passive" approaches to learning -- foremost among them, lectures. In medical education circles, "lecture" is fast becoming a term of derision.

Liaison Committee on Medical Education (LCME) accreditation standards

- The accreditation process requires a medical education program to provide assurances that its graduates exhibit general professional competencies that are appropriate for entry to the next stage of their training and that serve as the foundation for **lifelong learning** and proficient medical care.
- The faculty of a medical school ensure that the medical curriculum includes self-directed learning experiences and unscheduled time to allow medical students to **develop the skills of lifelong learning**. *Self-directed learning involves medical students' self-assessment of learning needs; independent identification, analysis, and synthesis of relevant information; appraisal of the credibility of information sources; and feedback on these skills.*

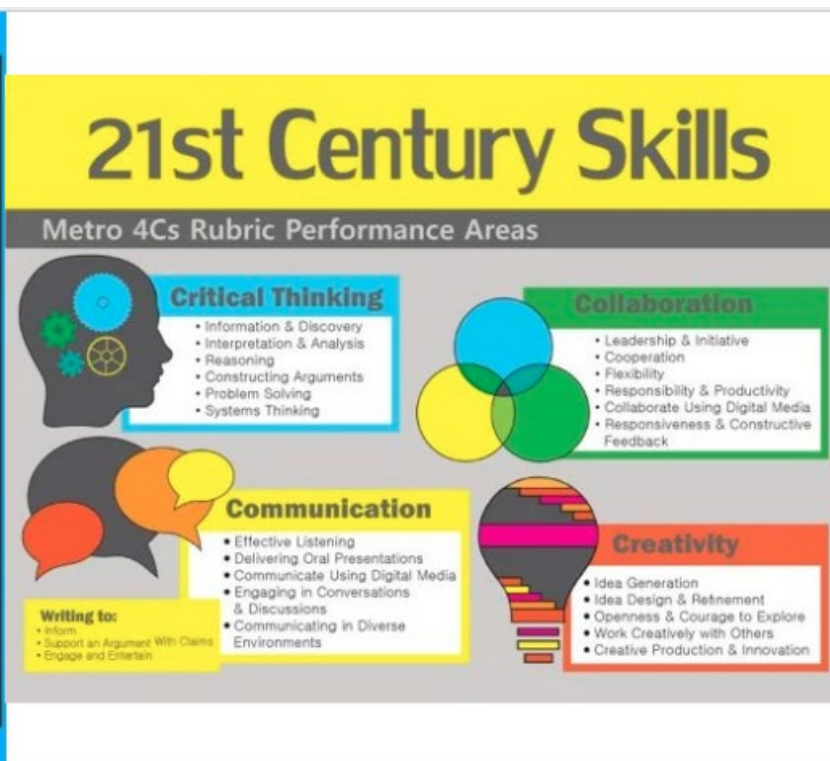
iClicker or Mentimeter

- **Classroom Response systems (CRS)** are quick and easy to use.
- CRS allow students to actively engage during the entire lecture.
- CRS gives instance feedback to both students & instructor.
- CRS helps initiate a dialogue between the students & instructor.
 - From a student perspective, these systems establish a benchmark on where he or she should be in regard to class material
 - CRS may serve as a foundation for new questions a student might have.

How does CRS help instructors to Understand Their Students?

- It allows instructors to know where students are in their understanding of the learning objectives at that moment in time.





What is Active Learning?

- **Active Learning** is a strategy that encourages a student to adopt purposeful and meaningful approaches to their learning.
- **Active learning** encourages students to ask questions and become engaged in their own learning process.
- The goal is to get students to be active participants in their learning instead of passive.



Examples of Active Learning include: **Escape Rooms**, **Problem-based learning**, **Team-based learning**, **Case-based learning**, and **Game-based learning**

Types of Active Learning Exercises (ALEs)

- Bacterial Growth assignment
- Crossword puzzle
- Fill-in-the-Blank
- Short answer worksheet
- Clinical Case competition
- Kahoot competition
- Writing assignment about non-pathogenic bacteria
- Writing assignment about pathogenic bacteria
- Developing a New Antibiotic assignment
- Concept Map (not an ALE, but a good exercise for students)

What are Escape Rooms?

- **Escape Rooms** are a team-based puzzle game using a real-life scenario where individuals unveil clues, solve riddles and puzzles, and complete tasks in order to unlock the next clue and ultimately figure out how to leave the room.
- **Escape Rooms** fosters collaboration & communication amongst group members, many of whom do not know each other.
- These real-life scenarios can be adapted to a variety of curriculums.



Escape Room

- Escape Rooms have been an effective tool for students in order to help in reinforcing course concepts
- They engage students with course content in exciting and challenging ways.
- They can be performed in person or in a virtual environment.
- Both environments can use various puzzles, riddles, and visual clues that can challenge the student groups

Biochemistry and Molecular Biology Education

Special Issue: Teaching in the Time of COVID-19



This issue contains nearly 40 rapid communications and full-length manuscripts that address the unique challenges and opportunities that have emerged due to the COVID-19 pandemic. Topics addressed include adapting to teaching online, teaching BMB content with COVID-related themes, unique laboratory opportunities, and other relevant content.

Published for the
International Union
of Biochemistry and
Molecular Biology

WILEY

Alonso G, Schroeder KT. Applying active learning in a virtual classroom such as a molecular biology escape room. *Biochem Mol Biol Educ*. 2020;48:514–515. <https://doi.org/10.1002/bmb.21429>

Escape Room for Molecular Biology I

MCL-1 plays a role in the development of cancer. It is an anti-apoptotic protein and inhibits apoptosis of damaged cells. An over-expression of the MCL-1 protein can be linked to various cancers such as, melanoma, breast cancer, and ovarian cancer. Professor Rue, mostly known for her cancer research, is battling a rare cancer at Beaumont Hospital in Michigan.

For 6 years, she has endlessly tried to develop a drug to inhibit MCL-1 in hopes of curing herself. However, her passionate pursuit was abruptly derailed when she was sent to the hospital 3 days ago. She is now unresponsive in critical care. However, hope remains!

Dr. Rue's research team reported that she may have created a successful peptide sequence as a drug but wasn't able to send it off for synthesis.

The file holding her peptide sequence was hidden somewhere here in her lab, but no one has been able to find it. It is up to your team to find the sequence in the next 25 minutes before the lab closes and all hope is lost for Dr. Rue. She is known for her love of puzzles and riddles. She always told her students that "the key to finding any solution is using both the right side and left side of your brain."

Please find her work and send it by courier to her oncologist in the next 25 minutes.

* Required

Please TYPE your group number in the space below.

Your answer

Escape Room for Molecular Biology I

* Required

Lock #3

To proceed to the next section, separate each answer with a comma followed by a space. Do not use capital letters.

Using the words left, right, high, and low. Solve each of the riddles. *

Proteins grow from C- terminus _____ N- terminus Directionality Lock

DNA polymerase reads in a 5' _____ 3' fashion

DNA polymerase 1 and 3 both have 3' _____ 5' exonuclease activity

When $\Delta H = (+)$ and $\Delta S = (+)$,
the reaction is spontaneous only at _____ temperatures

When $\Delta H = (-)$ and $\Delta S = (-)$,
the reaction is spontaneous only at _____ temperatures

Your answer _____



In this visual puzzle, there are 8 hidden letters. Together, they form a word.
What is it? _____ (hint: Innovation and _____ Production)

How do Escape Rooms help instructors to Understand Their Students?

- It allows instructors to see how the students apply the learning objectives when solving puzzles and riddles.
- It allows instructors to see how students interact with each other.
- It encourages instructors to get to know each student including their strengths and weaknesses.
- By utilizing an escape room, instructors can learn about their students outside of the traditional classroom setting.
- The students that led the groups were usually the “C” students.

Cancer Sucks	Genetics	DNA Damage	Name that Scientist	Posttranslational Modification	Wild Card
	<p>What is Active Learning?</p> <p>Active learning is a teaching technique in which students are engaged in the learning process. It is a shift from traditional lecture-based learning to a more student-centered approach. Active learning encourages students to think critically, solve problems, and work together to learn. It is a more effective way to learn than passive learning.</p> <p>Active Learning</p> <p>Active learning is a teaching technique in which students are engaged in the learning process. It is a shift from traditional lecture-based learning to a more student-centered approach. Active learning encourages students to think critically, solve problems, and work together to learn. It is a more effective way to learn than passive learning.</p>	<p>A study comparing lecture & PBL classes</p> <p>In the end of the semester, the lecture and PBL groups scored the same on the same exam. After one year the lecture group scored a 50% on the same exam and the PBL group scored an 80%.</p> <p>At the end of 2 years the lecture group retained 30% and the PBL group retained 50%.</p> <p>The next semester, neither group of students studied the material before either of the exams. The importance of this study is the higher retention in a PBL, not lecture suggests the PBL students will be better prepared in the future.</p>			
		<p>Thank you for your attention</p> <p>Any questions???</p>			

Molecular Biology Pyramid

- Molecular Biology Pyramid



Round 1

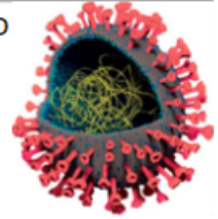
S“OME”thing Don't be an “ASE”

Bonds, Bonds, Bonds Studying Genes

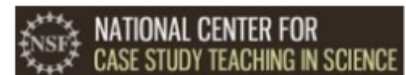
DNA Mutation Repairing DNA

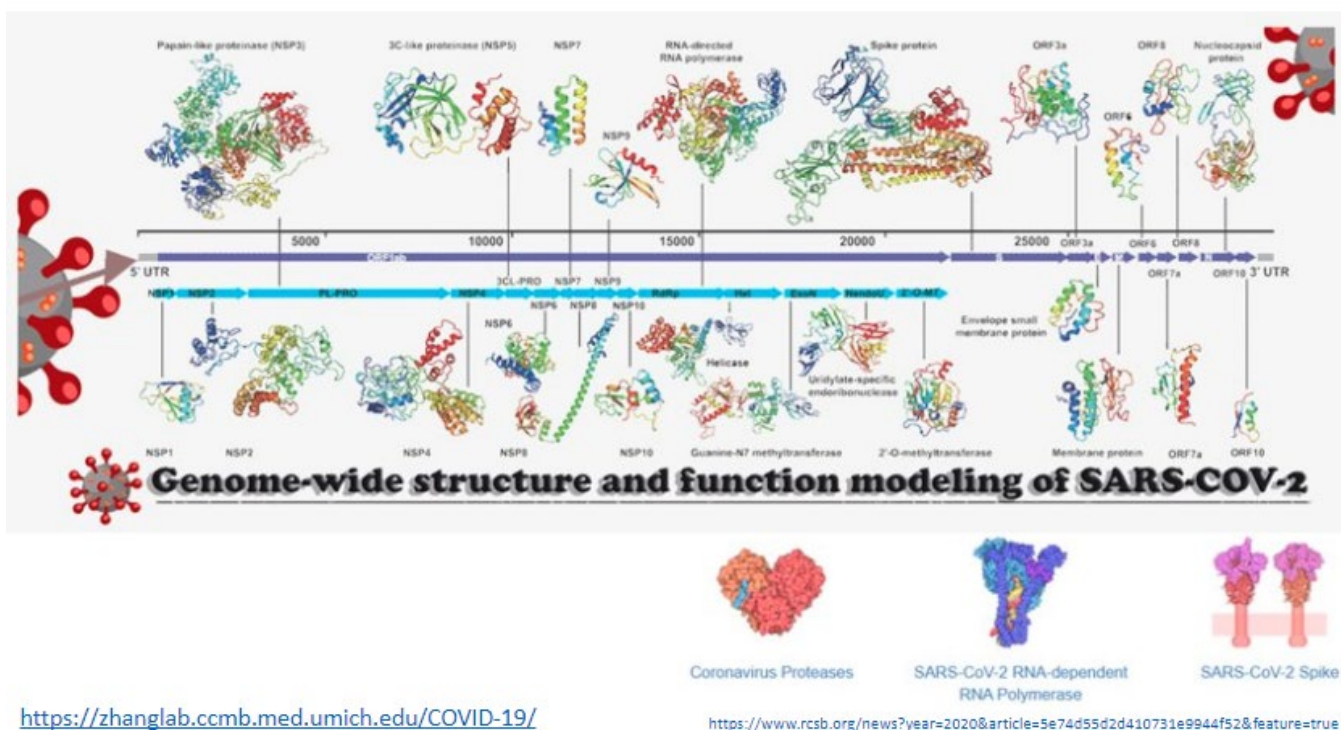
What is Case-Based Learning?

- **Case-Based Learning (CBL)** is a strategy that encourages students to engage with the course material or content using real-life cases, scenarios, or applications.
- Cases can range from scenarios that can be addressed in a single class period, sometimes in the first few minutes of class
- My favorite cases are sequential or iterative cases that require multiple class periods and multiple learning activities to arrive at multiple valid outcomes.
- There are many repositories such as the National Center for Case Study Teaching in Science for [cases](https://cstt.ucf.edu/teaching-resources/teaching-strategies/teaching-methods-overview/), but developing ones specific for your course content and learning objectives seem to work the best.



<https://cstt.ucf.edu/teaching-resources/teaching-strategies/teaching-methods-overview/>





Scheme for how to approach creating a Case-based learning (CBL) activity

- **Case-based learning (CBL)** has shown successful results in improving student achievement and facilitating retention of course content.
- CBL has traditionally been used for in person class exercises
- CBL can be used in during a scheduled videoconference as long as students are willing to be engaged and work with each other in a remote environment.
- A CBL case should focus on a few learning objective in mind.
 - Keep cases concise to only two or a few paragraphs
 - Encourage student cooperation for cases to work effectively *emphasizing 21st Century Learning Skills*

Thibaut & Schroeder. 2020. *Biochemistry and Molecular Biology Education*. 48:484–485. <https://doi.org/10.1002/bmb.21408>

Step 1: Plan

- Design learning objectives using Bloom's taxonomy which are measurable, achievable given time constraints, and relevant to the topic.
- The learning objective for this case can be: Students in this course will synthesize provided results from isoelectric focusing, native gels, and SDS-PAGE to correctly identify components of an unknown solution.

Step 2: Organize

- Organize students into online groups using a shared document and explain the expectations of the activity.
- In this case, groups were kept small with five or less students. The instructor explained that students should read the case study and work together to answer questions.

Step 3: Implement

- Provide inquiry questions for each group to answer. Examples used in this case are listed below:
- Name the parts and functional groups of amino acids. What is an R group? What is the difference between an acidic versus basic amino acid? Which amino acids have a chiral R group? How is pI calculated differently for an acidic-basic amino acid versus an amino acid with an uncharged side chain? Is pI higher in acidic side chain amino acids or lower than amino acids with no charged side chain? Identify the amino acid that made band 1. What reason might there be four bands on student 1's gel but five bands on student 2's gel? What is the difference between a native gel and SDS PAGE?

Step 4: Evaluate

- Evaluate students using challenging questions. These questions should synthesize the information from each test in the experiments conducted to find whether students truly understand the material. Examples from this case are below:
- Another student claims band 5 is Proline; explain whether this student is correct or incorrect and why. Using the data provided, what are the five amino acids in the unknown mixture; write their one letter and three letter names. Draw the structures of the five amino acids from the unknown mixture. Using an amino acid found at band 1, 2, and 4, determine the order of their elution in an anion exchange column at pH 9.5.

COVID-19 Case Learning Objectives

- Demonstrate the ability to identify the components of the coronavirus
- Recognize how mutations in the coronavirus affect the amino acids of different proteins
- Describe the processes of qPCR, RT-qPCR, and CRISPR including how they can be used to detect the coronavirus
- Design how CRISPR could be used as a therapeutic agent for the coronavirus.

Bloom's Taxonomy of Measurable Verbs

The image displays two screenshots of the Webcourses@UCF interface. The left screenshot shows the 'Groups' page for course BCH4024-20Summer DM01, with a search filter set to '27may20'. It lists four groups: '27may20 group 1', '27may20 group 2', '27may20 group 3', and '27may20 group 4'. The right screenshot shows the 'Assignments' page for the same course, featuring a search bar and a list of assignments: 'Case #5 ALE' (due May 27 at 12:50pm, ~5 pts), 'Case #6 ALE' (due May 27 at 12:50pm, ~5 pts), 'Chapter 15 Quiz' (due May 31 at 11:59pm, ~5 pts), and 'Ch 4 Learning Curve' (due Jun 1 at 11:59pm, ~15 pts).

Step 3: Implement

Zoom class Timeline

- **2:30 PM** Discuss Chapter 3 (*i.e. first half of chapters this week*)
- **2:45 PM** Introduce **Case #19**
- **2:50 PM** Start Breakout room for each group
 - Then go to Webcourses under the **People** tab and join the **21jan21 group** matching the same number as your breakout room number. Then, start a collaborative document under the **Collaborations** tab. Do not forget to add Dr. Schroeder to your collaborative document
- **3:10 PM** Bring all groups back to main room to discuss questions and answers.
- **3:20 PM** Discuss Chapter 8/9 (*i.e. last half of chapters this week*)
- **3:35 PM** Introduce **Case #4**
- **3:40 PM** Send groups back to their Breakout rooms
- **4:00 PM** Bring all groups back to main room to discuss questions and answers
- **4:10 PM** Answer last minute questions
 - Class ends at 4:20 PM
 - Remember to turn in the link to your case assignments to Case #19 and Case #4

COVID-19 Case

COVID-19 Case and Testing
Corona Virus Infectious Disease-19 also known as COVID-19 has been identified as the causative agent of a respiratory illness first detected in Wuhan, China in 2019. In scientific literature it is known as a Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). The virus is now responsible for at least 272,525 deaths in the US and 1.5 million deaths globally as of December 3, 2020 (from WHO).

- Coronavirus Infectious Disease-19 also known as COVID-19 has been identified as the causative agent of a respiratory illness first detected in Wuhan, China in 2019. In scientific literature it is known as a Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). The virus is now responsible for at least 272,525 deaths in the US and 1.5 million deaths globally as of December 3, 2020 (from WHO).
- Like most viruses, the coronavirus attaches to receptors on a human cell surface to invade the host cells, however it specifically does this using spike protein via angiotensin-converting enzyme 2 (ACE2). Researchers found that the SARS-CoV-2 spike protein was 10 to 20 times more likely to bind ACE2 on human cells than the spike from the SARS virus from 2003. To help support rapid research advances, the genome sequence of the new coronavirus was released to the public by scientists in China. A piece of the genome predicted to encode for its spike protein based on sequences of related coronaviruses was isolated at a lab located at the University of Texas at Austin and the NIAID Vaccine Research Center (VRC).
- In addition to the spike protein, the main protease (M^{pro}, also called 3CL^{pro}) has become a drug target because of its essential role in processing the polyproteins that are translated from the viral RNA. There have been several mutations that have occurred between main proteases of SARS-CoV (2003) and SARS-CoV-2 (2019).
- National Public Health Laboratory in Kathmandu, Nepal, submitted the final sequence to the WHO laboratory who confirmed that the final genome of sequenced SARS-CoV-2 consists of a single, positive-stranded RNA that is 29,811 nucleotides long, broken down as follows: 8,903 (29.86%) adenines, 5,482 (18.39%) cytosines, 5,852 (19.63%) guanines, and 9,574 (32.12%) uracils.
- Literature cited:
Sah et al. Complete Genome Sequence of a 2019 Novel Coronavirus (SARS-CoV-2) Isolated in Nepal. *ACM Microbiology Resource Announcements* March 2020, 9 (11): e01169-20; DOI: 10.1128/MRA.00169-20
Zhang et al. Crystal structure of SARS-CoV-2 main protease provides a basis for design of improved coronavirus main protease inhibitors. *Science*. 368, 409–412 (2020).

Like most viruses, the coronavirus attaches to receptors on a human cell surface to invade the host cells, however it specifically does this using spike protein via angiotensin-converting enzyme 2 (ACE2). Researchers found that the SARS-CoV-2 spike protein was 10 to 20 times more likely to bind ACE2 on human cells than the spike from the SARS virus from 2003. To help support rapid research advances, the genome sequence of the new coronavirus was released to the public by scientists in China. A piece of the genome predicted to encode for its spike protein based on sequences of related coronaviruses was isolated at a lab located at the University of Texas at Austin and the NIAID Vaccine Research Center (VRC).

In addition to the spike protein, the main protease (M^{pro}, also called 3CL^{pro}) has become a drug target because of its essential role in processing the polyproteins that are translated from the viral RNA. There have been several mutations that have occurred between main proteases of SARS-CoV (2003) and SARS-CoV-2 (2019).

National Public Health Laboratory in Kathmandu, Nepal, submitted the final sequence to the WHO laboratory who confirmed that the final genome of sequenced SARS-CoV-2 consists of a single, positive-stranded RNA that is 29,811 nucleotides long, broken down as follows: 8,903 (29.86%) adenines, 5,482 (18.39%) cytosines, 5,852 (19.63%) guanines, and 9,574 (32.12%) uracils.

Literature cited:
Sah et al. Complete Genome Sequence of a 2019 Novel Coronavirus (SARS-CoV-2) Isolated in Nepal. *ACM Microbiology Resource Announcements* March 2020, 9 (11): e01169-20; DOI: 10.1128/MRA.00169-20
Zhang et al. Crystal structure of SARS-CoV-2 main protease provides a basis for design of improved coronavirus main protease inhibitors. *Science*. 368, 409–412 (2020).

Questions:

- What are the components of a virus? How does this compare to the structural components of prokaryotes and eukaryotes? How do coronaviruses infect host cells? (to go deeper, what are the structural components of the coronavirus that make it unique?)
- Mutations in various SARS-CoV-2 proteins have caused it to become more virulent than other coronaviruses. This increased virulence is due to amino acids interacting more strongly with other molecules. Classify the 20 amino acids into groups and list what type of bonds/interactions each group can make. Also, define each type of bond/interaction.
- Several mutations were discovered in the spike protein. For the following 3 mutations, indicate what kind of mutation occurred.
 - T8782S in ORF1a, codons AGT to AGC
 - L9561S in ORF1a, codons UUA to UCA
 - L15607L in ORF1b, codons CUA to UUA
- Mutations were also discovered in the main protease (M^{pro}). Explain why a T285A makes COVID-19 more virulent than an S284A or I286L.
- What is qPCR and RT-qPCR? Explain the steps in each. How is reverse transcriptase utilized?
- RT-PCR is being used widely to test for COVID-19, why do you think this is? What does this say about the specificity and sensitivity of the results of the test?
- Draw the DNA coding template for the following RNA sequence that is a part of the coronavirus: 5'-UAAUCAGACAAGGAACUGAUUA-3'
- What is CRISPR? Explain the step by step process of how CRISPR works?
- How can CRISPR be used to help develop a therapeutic agent for the coronavirus?
- It is hypothesized that mutating a gene that codes for the spike protein may inhibit its ability to attach to a host's cell and cause further infection. Explain how site directed mutagenesis can help with this.

Step 3: Implement

agent of a Severe
st 299,300

ost cells,
2 on
ices, the
ce of the
vas
ter (VRC).

g target
There
nd SARS-

10
positive-
5,482



COVID-19 Case Questions

Step 3: Implement

- What are the components of a virus? How does this compare to the structural components of prokaryotes and eukaryotes? How do coronaviruses infect host cells? (to go deeper, what are the structural components of the coronavirus that make it unique?)
- Mutations in various SARS-CoV-2 proteins have caused it to become more virulent than other coronaviruses. This increased virulence is due to amino acids interacting more strongly with other molecules. Classify the 20 amino acids into groups and list what type of bonds/interactions each group can make. Also, define each type of bond/interaction.
- Several mutations were discovered in the **spike protein**. For the following 3 mutations, indicate what kind of mutation occurred.
 - T8782S in ORF1a, codons AGT to AGC
 - L9561S in ORF1a, codons UUA to UCA
 - L15607L in ORF1b, codons CUA to UUA
- Mutations were also discovered in the **main protease** (M^{pro}). Explain why a T285A makes COVID-19 more virulent than an S284A or I286L.
- What is qPCR and RT-qPCR? Explain the steps in each. How is reverse transcriptase utilized?
- RT-PCR is being used widely to test for COVID-19, why do you think this is? What does this say about the specificity and sensitivity of the results of the test?
- Draw the DNA coding template for the following RNA sequence that is a part of the coronavirus: 5'-UAAUCAGACAAGGAACUGAUUA-3'
- What is CRISPR? Explain the step by step process of how CRISPR works?
- How can CRISPR be used to help develop a therapeutic agent for the coronavirus?
- It is hypothesized that mutating a gene that codes for the spike protein may inhibit its ability to attach to a host's cell and cause further infection. Explain how site directed mutagenesis can help with this.

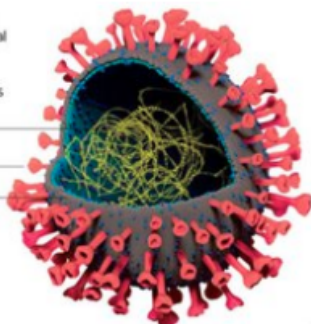


1. What are the components of a virus? How does this compare to the structural components of prokaryotes and eukaryotes? How do coronaviruses infect host cells? (to go deeper, what are the structural components of the coronavirus that make it unique?)

Anatomy of a virus

The covid-19 virus has several features we may be able to target with drugs to break it down and stop it entering cells

RNA enclosed in protein
Spike protein
Lipid membranes



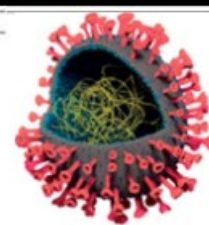
How do coronaviruses infect host cells?

- The protein spikes latch onto human cells, then undergo a structural change that allows the viral membrane to fuse with the cell membrane.
- The viral genes can then enter the host cell to be copied, producing more viruses.
- Recent work shows that SARS-CoV-2 binds to receptors on the human cell surface called angiotensin-converting enzyme 2 (ACE2).

Coronavirus (RNA virus)	Prokaryotes	Eukaryotes
Have Lipid membrane and Capsid	Have cell membrane	Have cell membrane
Cytoplasm	Cytoplasm	Cytoplasm
RNA enclosed in protein	DNA in nucleoid	DNA in nucleus
Use host's ribosomes	Have ribosomes in cytosol	Have ribosomes in cytosol
		Have membrane-enclosed organelles
Spike glycoprotein		

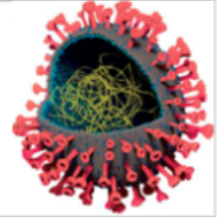
Student Perception of Curriculum

Positive	Count	Negative	Count	Other	Count
Application of what is learned with practice	31	Too much to learn/overwhelming	17	Need better terminology descriptions/a key terms page	1
Cooperative learning	20	Less time for review in class	11	Need explanations for why something is right	4
Awareness of what they need to know/learning objectives	13	Difficult to adjust to/easy to fall behind	10	Appreciates requests for feedback	1
Saves time (travel, schedule, etc.)	8	Too much busy work/homework	7	Improve or change online video lectures	4
Reinforces information	8	Too much is self-taught/not enough lecture covered	20	More professor accessibility outside of class needed	2
Flipped classroom material online is helpful	3	Difficult to understand	10	More concise resources needed	2
Can work at your own pace	5	Not ordered enough or focused	6	Consider slowly increasing homework over time	1
Students are responsible for the learning	3	Less time to ask questions	8	More games	2
Reminder to look over material beforehand	4	Practice in class may not match test format/irrelevant	14	Time put in equates to your grade	1
Homework is helpful	4	More practice questions/activities needed	8	Offer extra credit	1
More time to ask the professor questions	3	Group members not prepared/fear of group work	7	Professor will not tell me what to study: focus on	3
Helped with time management skills	3	Need to study before class	3	Need more teaching assistant interaction/utilization	1
It is fun/I enjoy it/engaging	10	Boring	2		
Gives idea of what exam questions might be like	3				
More digestible input/multiple ways to learn or present information	9				
Helps with studying	7				



Frequentist and Bayesian Statistical Findings

- The results from this study indicate final exam score is higher in the CBL curriculum.
- The average grade on the final exam was higher in the CBL curriculum semester (M= 81.9, SD= 13.262) versus the standard curriculum (M= 71.57, SD= 10.572)
- Instructors implementing this curriculum should expect an increase in scores between 3.539% and 17.112% on their medical biochemistry final exams



Exam	t-value	df	p-value	95% CI		BF ₀₁	95% CI		Cohen's d	95% CI	
				Lower	Upper		Lower	Upper		Lower	Upper
Including Grades from Withdrawals											
1	-1.519	57	0.135	-14.31	1.986	1.837	-14.47	2.15	-0.403	-0.930	0.129
2	-1.537	56	0.13	-11.812	1.557	1.943	-14.47	2.15	-0.401	-0.930	0.132
3	-0.573	48	0.569	-9.318	5.186	4.12	-11.95	1.69	-0.159	-0.721	0.404
4	1.382	48	0.174	-2.057	11.062	2.304	-9.48	5.35	0.379	-0.190	0.944
Final	1.996	48	0.052	-0.051	13.459	0.932	-2.19	11.19	0.562	-0.014	1.132
Excluding Grades from Withdrawals											
1	-0.547	51	0.587	-10.368	5.933	4.216	-10.34	6.11	-0.370	-0.930	0.195
2	-0.824	51	0.414	-9.472	3.959	3.62	-9.62	4.11	-0.426	-0.998	0.140
3	-0.573	48	0.569	-9.318	5.186	4.12	-9.48	5.35	-0.159	-0.721	0.404
4	1.382	48	0.174	-2.057	11.062	2.304	-2.19	11.19	0.379	-0.190	0.944
Final	3.06	48	0.004*	3.539	17.112	0.1247	3.38	17.27	0.861	0.269	1.444

*p < 0.05, BF₁₀₀ < 0.133

*p < 0.05, |BF₀₁| > 0.333

Microbes & Mages

A games where Microbes can help you survive or maim you from the inside.

- A Role-playing game where players adopt the roles of a Microbial Mage or its Apprentice in a fictional setting.
- Players take charge for acting out these roles within a narrative through a process of structured decision-making regarding character development.



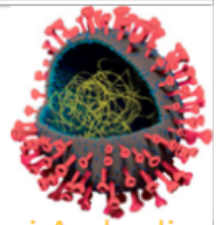
Other Ideas that have been suggested

- Live Action Role Play
 - A form of role-playing game where the participants physically portray their characters and enact a plot of the game
- Cosplay
 - I have thought about this numerous times
- Scavenger Hunt
- Family Feud
- Murder Mystery
- Clinical Case Competition Escape Room

THANK YOU

I WOULD LIKE TO THANK MY CURRENT & PAST TEACHING ASSISTANTS AT UCF

- | | | |
|---------------------|-----------------------|------------------------------|
| ■ Dylan Thibaut | ■ Marianne Sia | ■ Julia Webb |
| ■ Takuma Iwai | ■ Emily Svara | ■ Kevin Borges |
| ■ Joseph Risler | ■ Lihlenz Saint-Louis | ■ Arash Keshavarzi Arshadi |
| ■ Gabriela Alonso | ■ Megan Sorg | ■ Jie Hao |
| ■ Erika Lytle | ■ Maranda Morgan | ■ Jennifer Collins |
| ■ Zainab Baqri | ■ James Chang | ■ Jannelle Vienneau-Hathaway |
| ■ Jonadab Jaramillo | ■ Antonio Mele | ■ Lauren Allison |
| ■ Stephanie Pintos | ■ Roberto Spilka | ■ Jessica Huitsing |
| ■ Zeeshan Ahmed | ■ Nicholas Karppe | ■ Daniel Gonzalez |
| ■ Asia Rue | ■ Emelina Asto-Flores | |
| ■ Khadijah Stephen | ■ Rabeea Rehman | |



The Beginner's Guide to Academic Research and Biomedical Education



Dylan Thibaut

[Home](#) [Teachers](#) [Students](#) [Parents](#) [Contact](#)

A Free Distance Learning Tool for Science Teachers
MySciLife® is the perfect solution for providing connection, community, and educational continuity.

The people who bring you
TeachersFirst

MySciLife®: Social Media for Middle-Level Science

Welcome to MySciLife, a free, educational social media platform that enables enriched learning and engagement for middle-level science students! Students use MySciLife to collaborate, connect, and think critically as they create and respond to posts in a safe digital environment.

Teachers

Create your free account

Students

Join your class

Sparkling Lysosome:
I clean up the place, getting rid of waste 🗑️ and other unwanted substances that may get into the cell.

Sparkling Lysosome:
You're awesome, 🌟 but I'm always there to clean up any bad things that enter the cell.

Tenacious Cell Membrane:
Thanks, Sparkling Lysosome. We make a good team! 🤝

Tenacious Cell Membrane:
I may be thin, but I'm tough!

How does the function of your cell part affect tissue growth in muscle?

ASSIGNMENT: CELL PROCESSES





THE **source** for **Learning**

The people who bring you



TeachersFirst

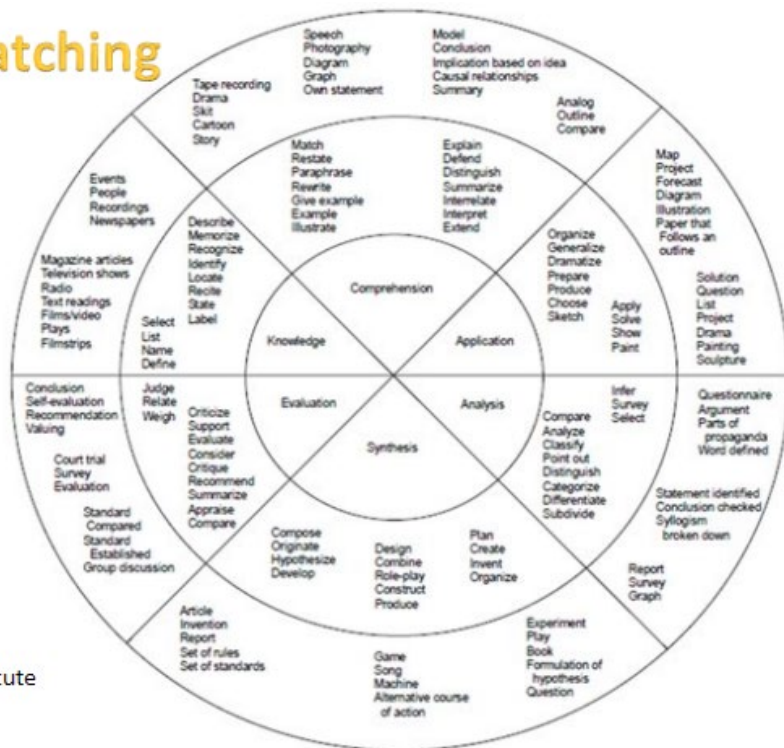
Library > MSL Resource Library > Folders

 MSL Prompt/Assignment Ideas	 MSL Resource Links	 How To and Help
 Platform Reference Documents	 Atoms Module	 Cell Module
 Chemical Reactions	 Earth Module	 Ecology Module
 Force, Motion, & Energy Module	 Genetics Module	 Human Body Systems Module
 Moon Phases & Seasons Module	 Universe Module	 Weather Module

Try creating Low Stakes modules to help students get engaged early in the course

Lab 0 - Lab Math module		Complete All Items	✓	+	...
...	Lab Math explanation part #1		✓	...	...
...	Lab Math practice quiz #1	Feb 8 | 2 pts | Submit	✓	...	...
...	Lab Math explanation part #2		✓	...	...
...	Lab Math practice quiz #2	Feb 8 | 2 pts	✓	...	...
...	Lab Math explanation part #3		✓	...	...
...	Lab Math practice quiz #3	Feb 8 | 3 pts	✓	...	...
...	Lab Math explanation part #4		✓	...	...
...	Lab Math practice quiz #4	Feb 8 | 3 pts	✓	...	...

Bloom's Verbs and Matching Assessment Types



Source: The Tenth Annual Curriculum Mapping Institute
Snowbird, Utah, July15-18, 2004.
Adapted from Benjamin Bloom

Problem-Based Learning Timeline

- **10:00 AM** Introduce assignment & encourage groups of 4-5 to form
- **10:05 AM** Chief Complaint displayed
 - Groups list 15-20 different Differential Diagnoses
- **10:20 AM** Ask volunteers to discuss their top 3-5 differential diagnoses
- **10:25 AM** Display Patient's History & Physical Exam
 - Groups identify key findings in patient's history & physical exam
- **10:45 AM** Ask volunteers to discuss their key findings
- **10:50 AM** Divulge Diagnostic Test & Lab Results
 - Groups write their Diagnosis, Concepts they brought from other courses, and concepts that they need to research more
- **11:10 AM** Divulge Diagnosis & ask groups to share their final thoughts
- **11:15 AM** Class ends

What is Problem-Based Learning (PBL)?

- **PBL** is a learner-centered approach.
- **PBL** is about becoming an active, independent, self-directed learner.
- **PBL** is a great way to put the pieces together and work in groups (learn to be a team-player).
- The goal of **PBL** is that students use the cases to identify the necessary concepts in order to master the topic
- **PBL** is not ^{only} about solving the case or diagnosing the patient; rather, it is about learning the foundational basic sciences relevant to the case

How does PBL help instructors to Understand Their Students?

- It allows instructors to see how the students apply the learning objectives towards a case or real-life scenario.
- It allows instructors to see how students interact with each other.
- It encourages instructors to get to know each student including their strengths and weaknesses when studying.
- The students that led the groups were usually the “A” students.

A study comparing Lecture & PBL classes

- At the end of the semester, the lecture and PBL groups scored the same on the same exam.
- **After one year the lecture group scored a 50% on the same exam and PBL group scored an 80%.**
- *At the end of 4 years the lecture group retained 20% and the PBL group retained 50%.*
- This was without review; neither group of students studied the material before either of the retests.
- The importance of this study is the higher retention in a PBL curriculum suggests the PBL students will be better prepared in the future.

Rouzbahmani, Rouzbahmani, Khazaeli, & Tajaddini. Comparing the long-term retention of a physiology course for medical students with the traditional and problem-based learning. *Adv in Health Sci Educ* 18:91-97 (2013)

Thank you for your attention

Any questions???

Pre-Major Transfer (Non-credit) Webcourses

Dr. Jeff Reinking, Associate Lecturer, Dixon School of Accounting, UCF

2021 Curriculum Alignment Conference:

**ADVANCING CURRICULUM
ALIGNMENT PARTNERSHIPS**

Pre-Major Transfer (Non-credit) Webcourses

Jeff Reinking

Associate Lecturer, Dixon School of Accounting, UCF



Our Goals with this Project

To provide **Information** and **Activities** that will help make our transfer students successful at the Dixon School of Accounting, UCF, and their chosen career path.





Ways we currently provide Information to our transfer students

1. Our Office of Professional Development does a great job with their orientation for new accounting student transfers.
 - However, it is quite a bit of information to take in for one day.
2. Our RSO Accounting clubs – had a once a semester formal meeting at UCF with students from the State Colleges before Covid. This will restart once we go F2F again.

1. (Mostly) Weekly Newsletter for all accounting students



Ways we have provided Information to our transfer students previously

We held live orientations for new “Pre-Accounting” majors during the second week of each semester.

- RSO's
 - Course sequencing
 - Electives
 - Recommended Minors
 - CPA requirements
 - Advising
 - Skills needed
 - Accounting profession and practice areas
 - Masters Degree
- Attendance at the orientations was very low
 - We were not comfortable making these mandatory because we were not comfortable with the available “penalties”





Activity that is important for our transfer students to complete before taking ACG 3131 to get into the Major.

The screenshot shows a Canvas LMS interface. The top navigation bar includes a hamburger menu, the breadcrumb 'Pre-Accounting Majors > Pages > Free Accounting Cycle Bootcamp in Wiley Plus', a 'Student View' button, and the 'webcourses@UCF' logo. A left sidebar contains a list of course items: Non-Credit, Home, Announcements, Modules, Assignments, Grades, People, Files, Syllabus, Outcomes, and Rubrics. The main content area has a 'View All Pages' button and a 'Published' status indicator. The title of the page is 'Free Accounting Cycle Bootcamp in Wiley Plus'. Below the title is the subtitle 'Wiley Plus Accounting Cycle Bootcamp'. The main text describes the bootcamp as a refresher course for foundational concepts in ACG 2021 Principles of Financial Accounting, intended to prepare students for ACG 3131 Intermediate Accounting I. It notes that the bootcamp is not part of the requirements for UCF's ACG 3131 and is not connected to the actual course. A link to a registration document is provided at the bottom.



All of this intersected with my prior work experience...

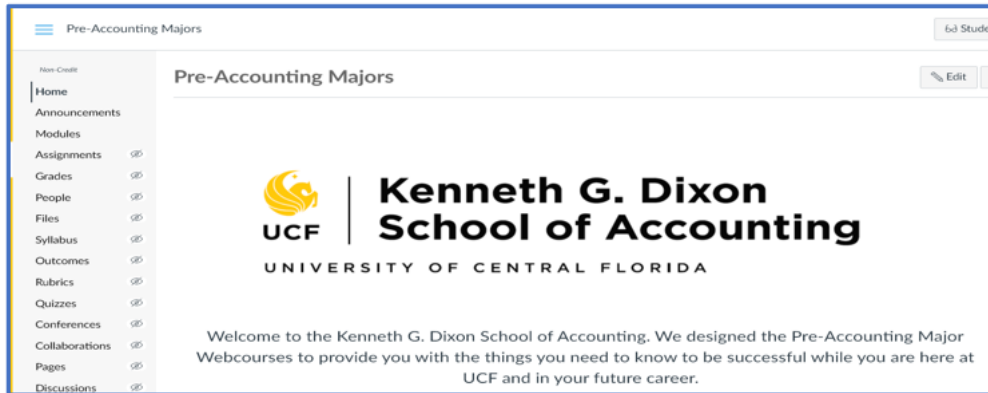
Analogy – computer training





New Non-Credit Webcourses for “Pre-Accounting” Majors Launched in Fall 2020

- Students are automatically enrolled once they become a Pre-Accounting major
- Welcome announcement once a semester



Contributors from across the Department

- Scholarship committee
- CPA advisor
- Faculty regarding the Accounting Profession
- BAP RSO – intro video





Contents of the Course

- WileyPlus Accounting Bootcamp
- RSO's – listing and contacts
- Summer Leadership opportunities and Internships
- Weekly Newsletter – how to join
- Accounting profession and Areas of practice
- Course sequencing, Pre-requisites,
- Recommended electives, Recommended minors
- Advising – where to go
- CPA licensure requirement
- Scholarships – availability and how to apply
- Masters of Science in Accounting - info



Measures of Success – need more

- Enrollment in Webcourses Course
 - Webcourses for Pre-accounting – 1,074 enrolled Fall 2020
 - Webcourses for Pre-accounting – 994 enrolled Spring 2021
- Bootcamp Enrollments
 - Students enrolled in bootcamp for Fall 2019 - (with extra credit) 319 – not in the Webcourses Course
 - Students enrolled in bootcamp for Fall 2020 (no extra credit) 105
 - Students enrolled in bootcamp for Spring 2021 (no extra credit) 58
- Scholarship Applications

Year	# Applicants
2021	62
2020	17
2019	48
2018	36
2017	29
2016	41
2015	38
2014	33





Challenges

- Keeping the course up to date
- Messaging students in an environment where they receive too many e-mails already
- How to measure the success and usefulness of the initiative
 - Survey to ascertain usefulness/improvements to course



Next Adventure(s)

- “Accounting Major” Webcourses
- Starting an Accounting focused Transfer Student Success organization that can be administered through the Webcourses





Questions and Suggestions



APPENDIX 2: List of Attendees

Name	Institution	Name	Institution
Alina Stefanov	UCF	Fai Howard	
Allan Danuff	CF	Gabrielle Younker	VC
Alycia Ehlert	DSC	Ginny Kopf	VC
Amanda Norbutus	VC	Graeme Lindbeck	VC
Amber Mullens	UCF	Hannah Jenkins	VC
Amy Comerford	VC	Harrison Oonge	UCF
Amy Locklear	DSC	Heidi Ovalles	VC
Anastasia (Hannah) Harris	VC	Holly Hollins	DSC
Andrew Lieb	EFSC	Isis Artze Vega	VC
Angela Lowman	VC	J Bottesch	EFSC
Angelia Smith	UCF	James Jackson	LSSC
Aref Altawam	VC	Janie Valdés	FIU
Benjamin Ohwovoriele (Ja Orr)	VC	Jeff "Migizi" Melton	
Bianca Monfilston	VC	Jeff Reinking	UCF
Bob Gessner	VC	Jess Schrader	EFSC
C Hudspeth	SSC	Jessica Kester	DSC
Carrie Henderson	FLDOE	Jessica Lipsey	DSC
Carrie Wells	EFSC	Jim McCloskey	VC
Cecilia Larsson	SSC	Jimmy Gamez	DSC
Celena Ziems	VC	Joanne Bedlek-Anslow	SSC
Cheri Cutter	VC	Joanne Kiriazes	VC
Cheryl Robinson [she/her]	VC	John McNutt	VC
Christa Diercksen	UCF	John Weiss	VC
Christine Hanlon (she/her)	UCF	Jonathan Lee	
Christopher Leibner	LSSC	Joseph Brennan	UCF
Collin Gustafson	VC	Joshua Poniatowski	
Dante Leon	DSC	Karen barley	
Debbie Barr	SSC	Karen Endebrock	DSC
Deborah Bradford	UCF	Kerry-Ann Wright	VC
Deidre Seker		Kersten Schroeder	UCF
Delaine Priest	UCF	Kim Maznicki	SSC
Delia M. Garcia	UCF	Kim Small	UCF
Donna Mixon	DSC	Kimberly Hardy	UCF
Eduardo Roman	DSC	Kirby Brown	CF
Eileen Corelli	EFSC	Kristen Chancey	LSSC
Elena Amesbury	CF	Kristin Abel	VC
Erika Kisvarsanyi	CF	Laila Nimri	SSC
Erin Myszkowski	UCF	Laura Blasi	VC

Laura Ross	SSC	Rochelle Swiren	SSC
Leonard Bass	VC	Rohan Jowallah	UCF
Leticia Gonzalez	UCF	Shari Hodgson	UCF
Lianna McGowan	VC	Sidra Van De Car	VC
Lina Williams	SSC	Stephen Summers	SSC
Lisa Cohen-East	VC	Teena Bhajan	VC
Liz Barnes		Teresa Dorman	UCF
Liza Schellpfeffer	VC	Teresa Dorman - COS	UCF
Lynn Hepner	UCF	Theodorea Berry	UCF
Magdala Emmanuel	VC	Tommy Minton	SSC
Marc Campbell	DSC	Upasana Santra	VC
Mark Collins	VC	Van Quach	SSC
Mark Paugh	CF	Zhongzhou Chen	UCF
Max Nagiel	DSC		
Melody Bowdon	UCF		
Mia Pierre-Wall	VC		
Michael Olson	DSC		
Michael Preston (He# His# Him)	UCF		
Michelle Kwon	UCF		
Mohua Kar	VC		
Muzaffer Oztek	SSC		
Nabeel Yousef	DSC		
Nancy Parks	LSSC		
Nataly Lopez	VC		
Nathan Baker	VC		
Nichole Jackson	VC		
Nichole Segarra	VC		
Pam Cavanaugh	UCF		
Pat Ferguson	SSC		
Paul Wilder	VC		
Pedro Patino	UCF		
Pete Nicely	CF		
Rachid Ait Maalem Lahcen	UCF		
Rebekah Lane	VC		
Richard Harmon	SSC		
Richard Vollaro	DSC		
Rob McCaffrey	VC		
Robert			