NISTS 2023
BE A CONNECTOR FOR TRANSFER STUDENT SUCCESS
Virtual • February 1-3 | Portland, OR • February 22-24

Facilitated Discussion

2832 - Inter-institutional Curriculum Alignment of Gateway Courses: Engaging Faculty in Transfer Student Success

Credits and Degree Pathways, Partnerships and Collaboration

This presentation will outline the history, provide an overview, and share recent data related to a faculty-driven, inter-institutional collaboration to align transfer courses shared between seven institutions. This effort resulted in improved transfer student success in gateway courses and expanded faculty collaborations. The success of this initiative, both qualitative and quantitative, can – and as our presenters will attempt to convince – should be experienced by any collection of institutions who share a student population.

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Inter-institutional Curriculum Alignment of Gateway Courses: Engaging Faculty in Transfer Student Success

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National Institute for the Study of Transfer Students
February 23, 2023

Objectives

In this session, we give a brief overview of the Curriculum Alignment initiative

…and through Q&A:

- Discuss the undergirding elements of a successful alignment process
- Discuss the impact of curriculum alignment, how information is shared

Institutional Description: UCF

Enrollment (FA21)	
Undergraduate	60,062
UG Transfer Students	28,176 47%

Demographics (UG)	
Minorities	39.8%
Hispanic/Latinx UCF is an Hispanic Serving Institution	29.3%
First Generation	21.3%
Pell Eligible	36.4%

Why Curriculum Alignment

https://curriculumalignment.ucf.edu

DirectConnect to UCF™

Statewide Course Numbering System

Achievement gaps between FTIC and Transfer

Learning Outcomes, Content/Skills, and Assessment Alignment

Faculty Turnover and Curriculum Drift (Johns-Boast, 2014)

Theoretical Foundation:

Framing Curriculum Alignment

Course-level curriculum alignment is critical to facilitate **seamless academic transition** from lower-level to upper-level courses and to eliminate curriculum gaps and redundancies (Abbot, 2014).

Curriculum alignment confirms **congruence** and **coherence** to the following:

- learning objectives or purposes;
- content or learning experiences;
- organization of these experiences in scope and depth; and
- assessment or evaluation (Biggs 2012; Tyler, 1949).

Curriculum alignment allows **faculty**, who are experts in their respective fields of study, to **assess and discuss** each of the above aspect and ensure that curriculum is aligned (Anderson, 2002).

Goals of Curriculum Alignment

To synchronize core content and the competencies

To increase propensity of state college students completing relevant lower-level courses

To ensure that the competencies are sufficient for successful curricular progression

https://curriculumalignment.ucf.edu

Structure

7 INSTITUTIONS & LOCAL HS

58 COURSES

11 DISCIPLINES: BI-ANNUAL MEETINGS

ANNUAL CONFERENCE

Process

What Pieces Were Put in Place to Make Curriculum Alignment Work?

Who is involved?

Stakeholders: faculty, advisors, and administrators

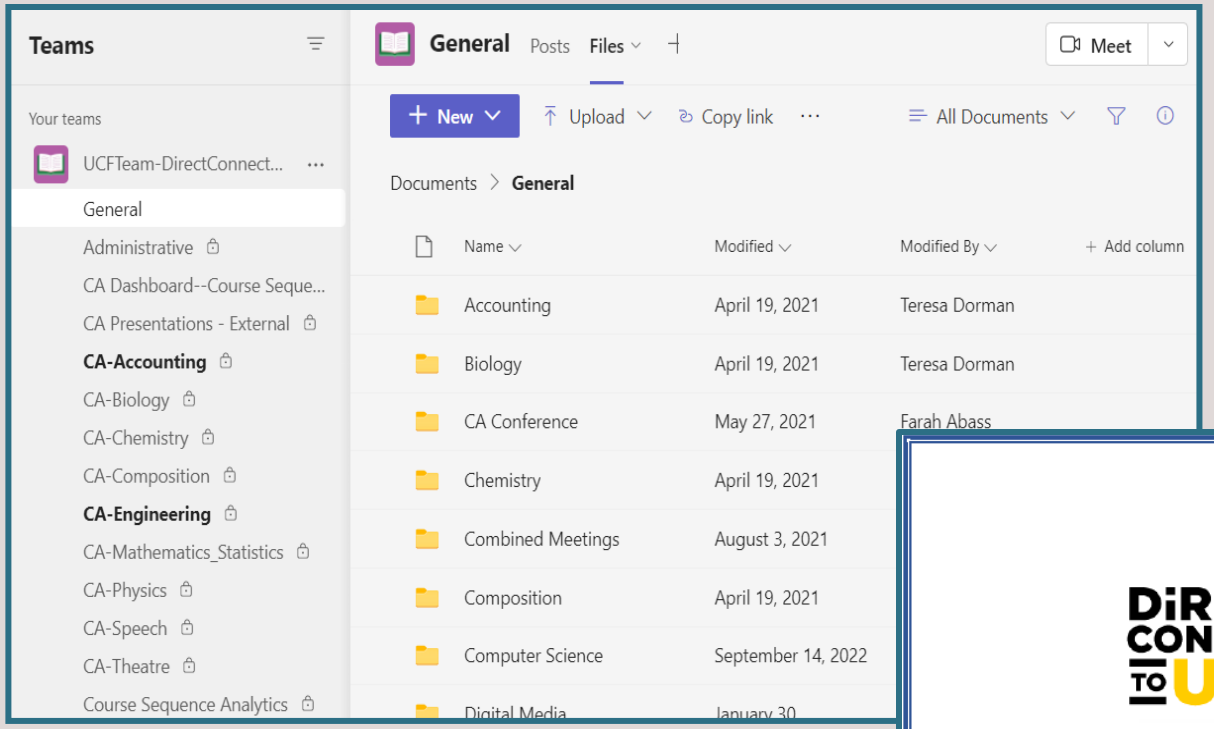
Central Administration: Two co-leads and an academic program coordinator.

What is involved?

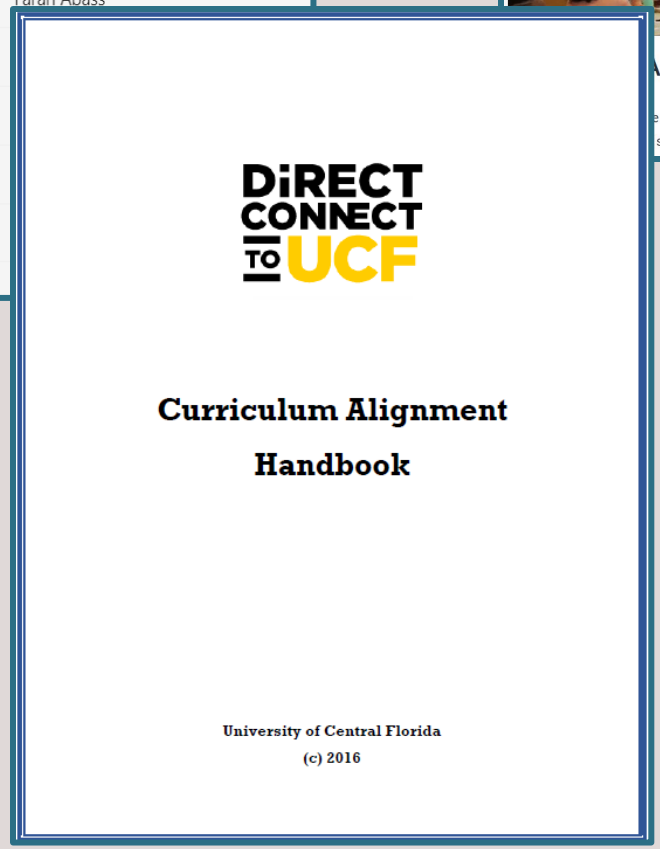
Resources: Teams' folder for collaboration, sub-channels for restricted access

Shared Information: Syllabi, instructional resources, course descriptions spreadsheet

Curriculum Alignment MS Teams Site



Curriculum Alignment Webpage: https://curriculumalignment.ucf.edu



Curriculum Alignment Handbook (2016)

Course Information by Institution

Mathematics/Statistics Course Information

Course	Details	CF	DSC	EFSC	LSSC	SSC	VC	UCF
MAC 1105	Course	*MAC 1105 3(3,0)*	*MAC 1105 3(3,0)*	*MAC 1105 3(3,0)*	*MAC 1105 3(3,0)*	*MAC 1105 3(3,0)*	*MAC 1105 3(3,0)*	*MAC 1105C 3(1,3)*
	Title	*College Algebra*	*College Algebra*	*College Algebra*	*College Algebra*	*College Algebra*	*College Algebra*	*College Algebra*
	PR/CR	PR: MAT1033 or CML:40	PR: MPT or college prep course or dev exemption or MAT1033 w/C or	PR: MPT or MAT1033 w/C	PR: MPT or MAT1033 w/C	PR: MPT or MAT1033 w/C	PR: MAT1033 w/C or MPT	PR: MPT or MAT1033 w/C
	Textbook	College Algebra (4th Ed) Beecher, Penna, Bittinger MyMathLab	Textbook: College Algebra, 4th Edition by Ratti, McWaters, and Skrzypek MyMathLab (Stand Alone Student Access Kit)	Essentials of College Algebra; 12th Edition Author(s): Lial, Hornsby, Schneider, Daniels ISBN-13: 978-0134697024	eText College Algebra (3rd Ed) Trigsted MyMathLab	College Algebra Essentials Mymathlab 6TH 22	College Algebra, Sullivan, 11th edition. MyLab Math access	College Algebra (4th Ed) Lial, Hornsby, Schneider, Daniels MyMathLab
	Notes							

Course Topics, Subtopic and Learning Outcomes

Last Reviewed/Updated: 8/28/20

PHY 1/2048 Physics with Calculus I

Does not reflect how long an instructor should spend on each topic or the depth of coverage of each topic. The topics are simply a reflection of things that should be covered during the length of the course.

Topics	Sub Topics	Type: M=Mandatory O=Optional V=Overview R=Review	*Relevance of Physics topic to student learning in identified course L = Low; M = Medium; H = High*	
			EGN 3310	EGN 3321
MEASUREMENT AND VECTORS	Standard units (SI) - basic and derived units.	M	H	H
	Vector operations - analytical and graphical solutions	M	H	H
	Distinguish between scalar and vector	M	H	H
	Curves, tangents to curves, vector field	M	H	H
	Dot and cross product	M	H	H
MOTION	Kinematics - instantaneous and average velocity, acceleration, speed.	M	L	H
	Types of motion-Circular, harmonic, linear, projectile, 2-and-3 dimensional, rotational.	M	L	H
	Graphical representation of motion	M	L	H
	Simple harmonic motion	M	L	H

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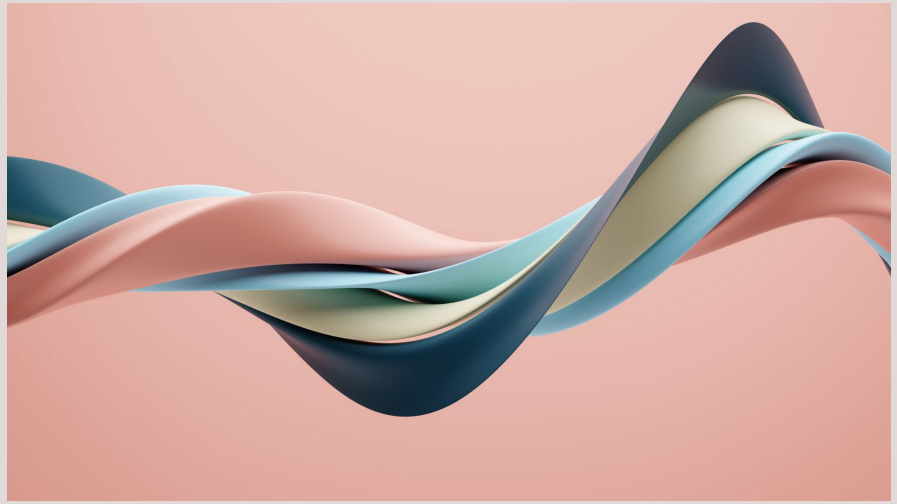


Assessment:
Course Sequence Data

Course Sequence Data

- 53 course sequence of a prerequisite course (any institution) to a target course (UCF)
- 2017/18 to 2019/20 comparison of
  1. Students who completed the prerequisite course at UCF and
  2. Transfer students who completed the prerequisite course elsewhere
- Data shared with all partners
- Limitation:
  - Institutional differences (i.e., admission criteria, institutional mission, etc.)
  - Grades as indicators of “success”
  - Included prerequisite courses with low “N”

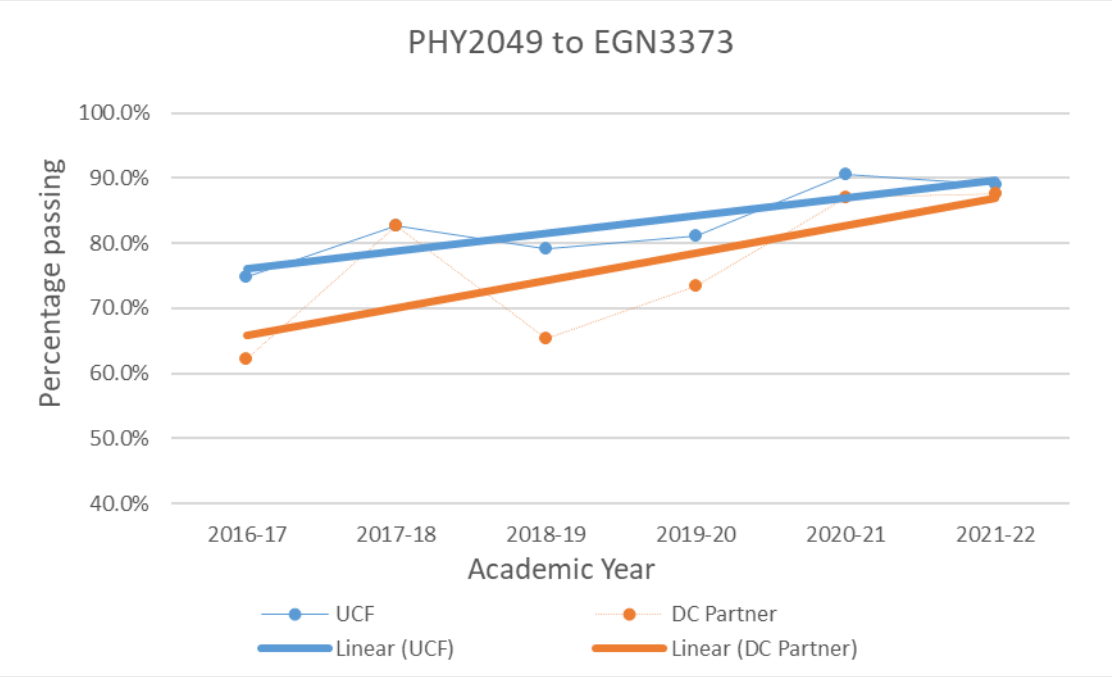
Course Sequence Data: Impact

- 17/18 to 19/20
  - 36% (n=19) suggested a trend of closing achievement gaps in target course
  - 47% (n=25) showed improvement in transfer student success

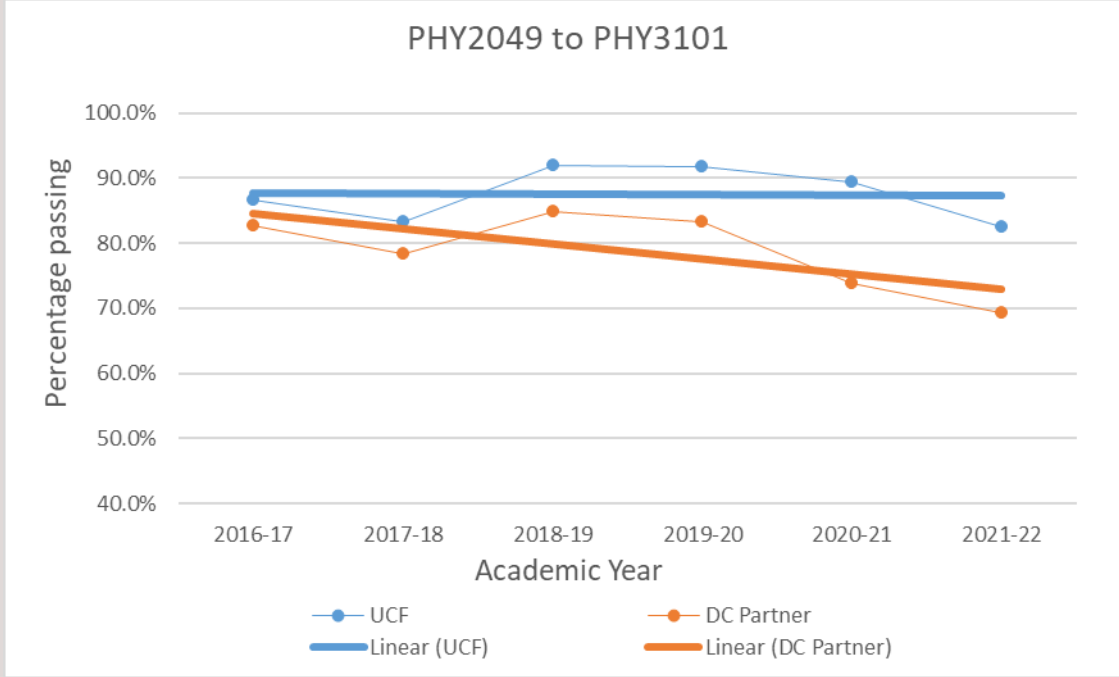
- 19/20 to 21/22 – *updated findings*
  - 51 sequences (three removed for no 21/22 data)
  - 53% (n=27) closing achievement gaps in target course
  - 43% (n=22) improved transfer student success

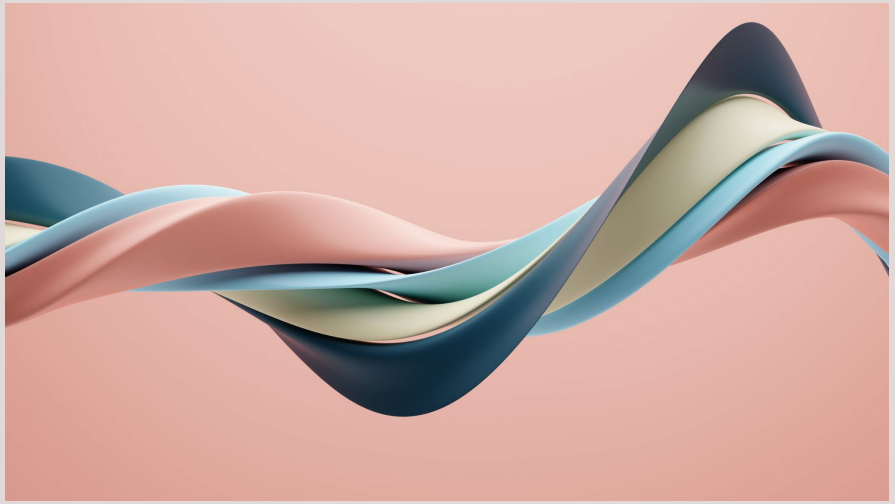
Course Sequence Data

Gap is closing
Performance is improving



Gap is increasing
Performance is flat/declining





Assessment: Faculty Survey and Focus Groups

Faculty Survey: Impact

- Validation of instructional practices
- Organic collaborations between faculty (and institutions)
  - Collaboration grants
  - Course redesign
  - Shared assessments / exam materials
  - Pedagogical improvements
  - Instructional materials

Faculty Focus Group: Impact

- Resource to Inform Selection of Instructional Materials:
  - *New, college algebra instructional materials and package were influenced by what was learned through CA*
  - *How UCF uses ALEKS and Knewton Alta (adaptive learning platforms) may be replicated so transfer student are familiar prior to transition to UCF*
  - *The ease of access to information shared in Teams Folder made it "really handy to have the data right there" when considering the right calculus textbook for our institution.*
- Resource for course review and update
  - *We are using the information shared through CA to "conceptualize where we need to go" and "it is just great to seeing how the sister colleges and my colleagues from different institutions are approaching [the aligning of curriculum]." I find this extremely helpful.*

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Thank you for attending!

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(via the conference app)

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