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
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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)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>60,062</td>
</tr>
<tr>
<td>UG Transfer Students</td>
<td>28,176</td>
</tr>
<tr>
<td></td>
<td>47%</td>
</tr>
</tbody>
</table>

**Demographics (UG)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minorities</td>
<td>39.8%</td>
</tr>
<tr>
<td>Hispanic/Latinx</td>
<td>29.3%</td>
</tr>
<tr>
<td>UCF is an Hispanic Serving Institution</td>
<td></td>
</tr>
<tr>
<td>First Generation</td>
<td>21.3%</td>
</tr>
<tr>
<td>Pell Eligible</td>
<td>36.4%</td>
</tr>
</tbody>
</table>
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)
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)
### Mathematics/Statistics Course Information

<table>
<thead>
<tr>
<th>Course</th>
<th>Details</th>
<th>CF</th>
<th>DSC</th>
<th>EFSC</th>
<th>LSSC</th>
<th>SSC</th>
<th>VC</th>
<th>UCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 1105</td>
<td>3(3.0)</td>
<td>College Algebra</td>
<td>College Algebra</td>
<td>College Algebra</td>
<td>College Algebra</td>
<td>College Algebra</td>
<td>College Algebra</td>
<td>College Algebra</td>
</tr>
<tr>
<td>PR/C</td>
<td>PR: MAT1033 or CML:40</td>
<td>PR: MPT or college prep course or dev exemption or MAT1033 w/C</td>
<td>PR: MPT or MAT1033 w/C</td>
<td>PR: MPT or MAT1033 w/C</td>
<td>PR: MAT1033 w/C or MPT</td>
<td>PR: MPT or MAT1033 w/C</td>
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</tr>
</tbody>
</table>

**Textbook**
- College Algebra (4th Ed) by Beecher, Penna, Bittinger
- MyMathLab

**Notes**

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### 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.*

**Type:** M=Mandatory, O=Optional, V=Overview, R=Review

<table>
<thead>
<tr>
<th>Topics</th>
<th>Sub Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEASUREMENT AND VECTORS</td>
<td>Standard units (SI) - basic and derived units.</td>
</tr>
<tr>
<td></td>
<td>Vector operations - analytical and graphical solutions</td>
</tr>
<tr>
<td></td>
<td>Distinguish between scalar and vector</td>
</tr>
<tr>
<td></td>
<td>Curves, tangents to curves, vector field</td>
</tr>
<tr>
<td></td>
<td>Dot and cross product</td>
</tr>
<tr>
<td>MOTION</td>
<td>Kinematics - instantaneous and average velocity, acceleration, speed.</td>
</tr>
<tr>
<td></td>
<td>Types of motion-Circular, harmonic, linear, projectile, 2-and-3 dimensional, rotational.</td>
</tr>
<tr>
<td></td>
<td>Graphical representation of motion</td>
</tr>
<tr>
<td></td>
<td>Simple harmonic motion</td>
</tr>
</tbody>
</table>

**Relevance of Physics topic to student learning in identified course**
- L = Low; M = Medium; H = High
- EGN 3310 | EGN 3321

- H | H
- H | H
- H | H
- H | H
- H | H
- H | H
- H | H
- L | H
- L | H
- L | H
- L | H

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Course Information by Institution

Course Topics, Subtopic and Learning Outcomes
Join at slido.com #8541 569
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.
Contact Information

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https://curriculumalignment.ucf.edu

References

PLEASE COMPLETE A SESSION EVALUATION (via the conference app)

This session's id# is: **2832**