Credit Loss and State Transfer Pathways

Oregon Senate Committee on Education
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Scope of Credit Loss

**Figure 3: Estimated Percentage of Credits Lost in Transfer, on Average, by Transfer Path, Academic Years 2003-04 to 2008-09**

- **2-year private for-profit**
  - 2-year public for-profit (1%)
  - 2-year public (1%)
  - 2-year public for-profit (1%)
  - 2-year public (9%)
  - 4-year private for-profit (1%)
  - 4-year private for-profit (1%)
  - 4-year public (13%)
  - 4-year public (13%)
  - 4-year private nonprofit (3%)
  - 4-year private nonprofit (3%)
  - 4-year public (4%)
  - 4-year public (4%)
  - 4-year public (4%)
  - 2-year public (26%)
  - 2-year public (26%)

**Average for all transfer students**
- Lower bound
- Upper bound

= 19.8 quarter credits, assuming student completes 90 community college credits before transfer

**Source:** Government Accountability Office (2017)
Impact of Credit Loss on Students

Credit Loss: Increased tuition costs for community college transfer students

- ~20 credits ==
  - $15,800 at University of Oregon
  - $14,800 at Oregon State University
  - $12,100 at Portland State University

** Doesn’t account for other educational costs incurred for staying in school longer

Credit Loss → Lower bachelor’s degree completion rates for community college transfer students

- Bachelor’s degree attainment rates predicted to increase from 45% to 54% if credit loss were eliminated

**Source: Monaghan & Attewell (2015)**
What leads to credit loss?

Multiple Factors

• Inadequate state policy design and transfer pathways
• Complexity of different institutional requirements and degree/pathway structures
• Lack of early, personalized, and knowledgeable advising for students interested in transfer
• Student uncertainty about major and/or destination

Source: Hodara et al. (2016); Taylor & Jain (2017)
### Addressing Transfer Pathways and Credit Loss with State Policy

Table 2. State Transfer Policies and Policy Descriptions.

<table>
<thead>
<tr>
<th>Policy dimension</th>
<th>Description/definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Core curricula and general education packages</td>
<td>Fully transferrable general education courses across all public institutions (ECS, 2016).</td>
</tr>
<tr>
<td>State legislation or statue</td>
<td>State statute or legislation that governs transfer or a portion of transfer. As of 2010, 36 states had state legislation or statute (Smith, 2010).</td>
</tr>
<tr>
<td>Common course numbering</td>
<td>A common numbering system for lower division courses at public institutions. As of 2016, 16 states have common course numbering systems (ECS, 2016).</td>
</tr>
<tr>
<td>Community college and applied baccalaureate degrees</td>
<td>Policies that help ensure transferability of technical courses to allow for students with applied associate's degrees to transfer to a bachelor's degree program, currently offered in 39 states (Townsend, Bragg, &amp; Ruud, 2008).</td>
</tr>
<tr>
<td>Guaranteed transfer of an associate’s degree</td>
<td>Policies often ensure credit transferability, waiving of general education requirements at the transfer institution, and admission with junior standing. As of 2016, 31 states have this policy (ECS, 2016).</td>
</tr>
<tr>
<td>Reverse credit transfer</td>
<td>Policies that allow for transfer of credit from a 4-year to a 2-year for the purpose of conferring transfer students an associate’s degree (Taylor, 2016), currently available in 49 states with 13 states with legislative policies (Garcia, 2015).</td>
</tr>
<tr>
<td>Statewide articulation guides and websites</td>
<td>ECS (2016) reports that 35 states have statewide guides that provide information to students and families about the mechanics of transfer and transfer requirements.</td>
</tr>
<tr>
<td>Student incentives and rewards</td>
<td>Policies that incentivize transfer through priority or guaranteed admission, waiving institution-specific general education requirements, providing junior status, and transfer scholarships; 22 states have such policies (Smith, 2010); 18 states have performance-based funding formulas that include transfer metrics (NCSL, 2015).</td>
</tr>
<tr>
<td>Transfer associate’s degrees</td>
<td>State pathways and programs whereby students earn an associate’s degree and seamlessly transfer from 2-year to 4-year with junior status, currently implemented or under development in 10 states (Kisker, Wagoner, &amp; Cohen, 2012).</td>
</tr>
<tr>
<td>Transfer data reporting</td>
<td>Policies that require data tracking on transfer and mobility; in place or under development in 37 states (ECS, 2016).</td>
</tr>
<tr>
<td>Transfer pathways and program major articulation</td>
<td>Policies that allow for seamless transfer from 2-year to 4-year within a specific pathway or program of study (Bautsch, 2013; WICHE, 2010).</td>
</tr>
</tbody>
</table>

Source: Taylor & Jain (2017)
Reforming State Transfer Pathways

New state-level discipline-specific transfer pathways that:

• Are at the program/major/pathway level and align with specific bachelor’s degree pathways
• Have common course sequence for the first two years (similar sequence as students who begin at a 4-year institution) → *engage students in major coursework prior to transfer.*
• Are mapped out for students
• Are articulated across multiple sending and receiving institutions
• Have transparent and accessible guides, tools, websites, and/or expanded advising for students and families
• Have common general education core and/or common course numbering
• May create new degree that shifts some general education to 4-year
• Were developed and improved based on a state/system-wide collaborative process

States: California, Colorado, Ohio, Michigan, Tennessee, Washington
### Tennessee Transfer Pathways

**PSYCHOLOGY ASSOCIATE OF ARTS**

**Program Requirements**

<table>
<thead>
<tr>
<th>SEMESTER &amp; COURSES</th>
<th>CREDIT HOURS</th>
<th>SEMESTER &amp; COURSES</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1 (Fall)</td>
<td></td>
<td>Semester 2 (Spring)</td>
<td></td>
</tr>
<tr>
<td>ENGL 1010: English Composition I</td>
<td>3</td>
<td>ENGL 1020: English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1510: Introductory Statistics**</td>
<td>3</td>
<td>COMM 2025 or COMM 2045</td>
<td>3</td>
</tr>
<tr>
<td>History***</td>
<td>3</td>
<td>History***</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1010: Introduction to Psychology</td>
<td>3</td>
<td>Social/Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language sequence II*</td>
<td>3</td>
<td>Foreign Language sequence II*</td>
<td>3</td>
</tr>
<tr>
<td><strong>Subtotal Semester 1</strong></td>
<td>15</td>
<td><strong>Subtotal Semester 2</strong></td>
<td>15</td>
</tr>
<tr>
<td>Semester 3 (Fall)</td>
<td></td>
<td>Semester 4 (Spring)</td>
<td></td>
</tr>
<tr>
<td>Humanities/Literature</td>
<td>3</td>
<td>Electives (unspecified)</td>
<td>4</td>
</tr>
<tr>
<td>Psychology elective****</td>
<td>3</td>
<td>Psychology elective****</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1100 or BIOL 1110****</td>
<td>4</td>
<td>BIOL 1020 or BIOL 1120****</td>
<td>4</td>
</tr>
<tr>
<td>Humanities/Fine Arts</td>
<td>3</td>
<td>Humanities/Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>Electives (unspecified)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Semester 3</strong></td>
<td>16</td>
<td><strong>Subtotal Semester 4</strong></td>
<td>14</td>
</tr>
</tbody>
</table>

**Total Credit Hours** 60


### Ohio Transfer to Degree Guarantee

**Statewide Economics Associate of Arts or Science**

*Guaranteed Transfer Pathways*

*June 30, 2018*

If a student is interested in a Business Economics (Bachelor of Business Administration/Bachelor of Science in Business/etc.) degree, then the student should follow the Statewide Guaranteed Business Transfer Pathway. This Associate of Arts or Associate of Science pathway in Economics is intended for students who would like to pursue a Bachelor of Arts, or at some institutions a Bachelor of Science, in Economics.

**GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER MODULE**

<table>
<thead>
<tr>
<th>Minimum Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

**ENGLISH COMPOSITION AND ORAL COMMUNICATION:**

- Course 1: Any OTM approved Print Writing (TM2011) course

**MATHEMATICS, STATISTICS, AND LOGIC:**

- Course 1: Calculus I (TM0605) or Business Calculus (TM0615)

**ARTS AND HUMANITIES:**

- Course 1: Any OTM approved Arts and Humanities course
- Course 2: Any OTM approved Arts and Humanities course (Recommended: Humanities related)

**SOCIAL AND BEHAVIORAL SCIENCES:**

- Course 1: Principles of Microeconomics (OS2040)
- Course 2: Any OTM approved Social and Behavioral Sciences course (outside of economics)

**NATURAL SCIENCES:**

- Course 1: Any OTM approved Natural Science course
- Course 2: Any OTM approved Natural Science course with lab

**ADDITIONAL CREDITS:**

- Course 1: Any OTM approved Second Writing (TM2022) course
- Course 2: Introductory Statistics (TM0101)

- Courses: up to 3 additional hours of OTM approved courses

**GENERAL EDUCATION/OHIO TRANSFER MODULE TOTAL:** 37-39

**Advising Notes:**

- Where it indicates “Any OTM approved,” students should work closely with their advisors.
- Where it indicates “Any OTM approved,” students should choose courses outside different areas within that category.
- A pre-requisite such as College Algebra (TM0607) may be needed for a student to reach Calculus I (TM0605) or Business Calculus (TM0615).
- Students intending to pursue a Bachelor of Science in Economics should take Calculus I (TM0605).
- Principles of Microeconomics (OS2040) also counts toward pre-major/beginning major requirements.
- Only one natural sciences lab is required in some cases, taking one Biological Science and one Physical Science is preferred. Check with your receiving institution.
- Core recommended course is OTM approved Oral Communication.
MiTransfer Pathways

Washington’s Associate of Science-Transfer

ASSOCIATE OF SCIENCE TRANSFER DEGREE #1

Biological Sciences, Environmental/Resource Sciences, Chemistry, Geology, and Earth Science

(Effective Fall 2000)

The Associate of Science Transfer (AS-T) Degree #1 is designed to prepare students for upper division study in the areas of biological sciences, environmental/resource sciences, chemistry, geology, and earth science. Completing the AS-T degree will prepare students for upper division study; it does not guarantee students admission to the major.

In order to prepare students for upper division study, the Associate of Science Transfer Degree #1 should possess the following characteristics:

1. Be issued only to students who have earned a cumulative grade point average of at least 2.00, as calculated by the degree awarding institution.
2. Be based on 90 quarter hours of transferable credit distributed as follows:
   A. Communication Skills (minimum 5 credits)
      Minimum 5 quarter credits in college-level composition course.
   B. Mathematics (10 credits)
      Two courses (10 credits) required at or above introductory calculus level. (See also D2 below.)
   C. Humanities and Social Science (minimum 15 credits)
      Minimum 5 credits in Humanities; and Minimum 5 credits in Social Science; and An additional 5 credits in either Humanities or Social Science for a total of 15 credits.
   D. Pre-major Program (45 – 50 credits)
      1. Chemistry (for science majors) sequence (15 credits).
      2. Third quarter calculus or approved statistics course (5 credits).
      3. Biology (for science majors) or physics (calculus-based or non-calculus-based) sequence (15 credits).
      4. Additional requirements: 10 -15 credits in physics, geology, organic chemistry, biology, or mathematics, consisting of courses normally taken for science majors (not for general education), preferably in a 2- or 3-quarter sequence.
   E. Remaining Credits (10-15 credits)
      Sufficient additional college-level credits so that total credits earned are at least 90 quarter credits. These remaining credits may include prerequisites for major courses (e.g., pre-calculus), additional major coursework, or specific general education or other university requirements, as approved by the advisor.

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### MiTransfer Pathways Worksheet

**BUSINESS PROGRAM WORKSHEET**

In the sections below, institutions should fill in courses that are required, recommended, or optional in the first two years. In the next two years of the academic program and will facilitate the multi-institutional transfer agreements in each MiTransfer Pathways program.

Please visit the project’s digital forum at [https://canvasstructure.com/courses/1362798](https://canvasstructure.com/courses/1362798) to upload your final worksheet before December 1, 2016 to the single module repository entitled Final Phase 1 Worksheets.

**DEGREE PROGRAM INFORMATION**

Add program-related information including your institution, the degree and program, and the total credits required to complete the degree. Complete an additional worksheet for each degree program. For example, business programs need to complete one worksheet per program for business admin, marketing, finance, international business, etc.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Degree/Program</th>
<th>Credits Required</th>
</tr>
</thead>
</table>

**也不想 TRANSFER AGREEMENT (MTA)**

Add MTA courses that are specifically recommended/required for this degree. Otherwise, assume that students can select from the menu of MTA courses.

<table>
<thead>
<tr>
<th>MTA Requirement</th>
<th>Subject/ Course Number</th>
<th>Course Title</th>
<th>Credit hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>English/Comm. (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics (1)</td>
<td></td>
<td>Statistics</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS**

**MiTransfer Pathways Courses**

Add the courses you and your colleagues or colleagues’ advisors have agreed upon “pathways courses” which were identified at the MiTransfer Pathways Summit. If a course also fulfills an MTA distribution requirement, list it here but only count the hours in the MTA section.

<table>
<thead>
<tr>
<th>Pathway Course</th>
<th>Subject/ Course Number</th>
<th>Course Title</th>
<th>Credit hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microeconomics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macroeconomics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Accounting</td>
<td></td>
<td></td>
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<tr>
<td>Managerial Accounting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Law</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS**

**REMAINING DEGREE REQUIREMENTS**

**Universities:** Add any courses that were not identified as MiTransfer Pathways courses, but are required, recommended, or optional in the first two years. Add any additional non-MTA general education requirements that can transfer.

<table>
<thead>
<tr>
<th>General Education or Program Requirement</th>
<th>Subject/ Course Number</th>
<th>Course Title</th>
<th>Credit hrs.</th>
</tr>
</thead>
</table>

**TOTAL CREDITS**

CC Only: Add remaining hours.
Colorado Transfer Degrees

Transfer Degrees

These agreements allow you to graduate from a community college with a 60-credit Associate of Arts (AA) or Associate of Science (AS) degree, enroll with junior status at a university and complete the bachelor's degree in no more than an additional 60 credits (for a total of 120 credits).

Note: Agreements for selected transfer degrees may require up to an additional 66 credits (for a total of 126 credits).

Have questions about Statewide Transfer Articulation Agreements? Review these frequently-asked questions and answers.

Transfer Agreements

- Agriculture Business (Approved: 4/5/13; Effective: Fall 2013; Revised November 2018)
- Agricultural Education (Approved: 4/9/10; Effective: Fall 2010; Revised December 2018)
- Animal Science (Approved: 4/5/13; Effective: Fall 2013; Revised November 2018)
- Anthropology (Approved: 4/14/12; Effective: Fall 2012; Revised May 2019)
- Art History (Approved: 12/4/14; Effective: Spring 2015 Revised: November 2018)
- Biology (Approved: 12/4/14; Effective: Spring 2015 Revised: May 2019)
- Business (Approved: 1/7/11; Effective: April 2011; Revised December 2018)
- Chemistry (Approved: 12/4/14; Effective: Spring 2015 Revised: December 2018)
- Communication (Approved: 11/6/14; Effective: Spring 2015 Revised: December 2018)
- Criminal Justice (Approved: 12/22/13; Effective: Spring 2013 Revised: December 2018)
- Economics (Approved: 1/7/11; Effective: April 2011; May 2019)
- Early Childhood Teacher Education (Approved: 8/7/15; Effective: Fall 2015; Revised December 2018)
- Elementary Teacher Education (Approved: 8/7/15; Effective: Fall 2015; Revised December 2018)
- Engineering (see below)
- English (Approved: 12/2/14; Effective: Spring 2015 Revised: May 2019)
- Environmental Horticulture - Landscape Business (Approved: 8/4/16; Effective: Fall 2016 Revised: December 2018)
- Equine Science (Approved: 8/4/16; Effective: Fall 2016 Revised: December 2018)
- Fermentation Sciences (Approved: 12/4/14; Effective: Fall 2015; Revised December 2018)

California Associate Degree for Transfer (ADT)

Los Angeles City College
Associate in Science Transfer Degree

PHYSICS (AS-T)

The Associate in Science in Physics for Transfer is designed for students who would like to transfer to a California State University (CSU) to complete a bachelor's degree with a major in Physics. The degree provides a foundation necessary for continued training at the upper division level for Physics majors, and also provides a foundation for majors in physical science, math, and engineering. Students who complete the degree meet minimum CSU eligibility requirements as an upper-division transfer, fulfill major preparation requirements and receive priority consideration at a CSU campus only for a major that has been deemed as similar.

<table>
<thead>
<tr>
<th>Required Core</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 101  Physics for Engineers and Scientists I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 102  Physics for Engineers and Scientists II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 103  Physics for Engineers and Scientists II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 261  Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 262  Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 263  Calculus III</td>
<td>5</td>
</tr>
</tbody>
</table>

Total Units for Major: 30
Implementing Transfer Associate’s Degrees and Pathways

1. Legislation as Driver
2. Presidential Leadership and Statewide Governance/Coordination
3. Clear, Ongoing Organizational Structure
4. The Autonomy/Efficiency Balancing Act
5. Building Trust and Allyinng Fears through Faculty-Driven Processes

Source: Kisker, Wagoner, & Cohen (2011)