

Written Testimony
Prepared for the
U.S. House of Representatives
The Committee on Education and the Workforce Hearing
"Keeping College within Reach: Meeting the Needs of
Contemporary Students"

Prepared by
David K. Moldoff
CEO and Founder of AcademyOne, Inc.

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2175 Rayburn House Office Building

Good Morning Chairman Kline, Ranking Member Miller and Members of the Education and the Workforce Committee of the U.S. House of Representatives.

Thank you for inviting me to testify on this critically important issue of keeping college within reach and meeting the needs of contemporary students.

My name is David Moldoff. I am the CEO of AcademyOne, a company located in West Chester, Pennsylvania. AcademyOne is a technology consulting firm focused on addressing the implications of student mobility, academic credit portability and prior learning recognition. The company has developed a suite of navigational tools that assist states and institutions in addressing the diverse patterns students pursue as they follow their academic and learning aspirations.

A series of accidents led me to the realization that the large multi-faceted student information systems I was creating, supporting, implementing and augmenting over 35 years for the various technology companies that I either

started or joined were hampering institutional efforts to address the complexity of student mobility and academic credit portability. This is because institutional information systems were, and still are, standalone¹. I came to realize that the duplication, redundancy and disparity employed by these standalone systems were impeding our national and statewide goals to improve college completion efforts. I concluded that students progressing through a single college or university in four years, the traditional student was now the exception and not the rule. "Alma mater" was being replaced with "I am mobile." In 2005, I was compelled to start AcademyOne.

In 2006, AcademyOne launched our national website, CollegeTransfer.Net. Today, over 1,200 institutional profiles are summarized and accessed annually by well over a million students who are looking to answer the question "will my credits transfer?" When CollegeTransfer.Net was launched, because of the scale of the challenge there were few online resources for students to use to self-assess how their prior learning would transfer from one school to another. The first national course atlas was created when we collected 3.5 million college courses, well over 6 million course equivalencies and 20,000 transfer articulation agreements, which were being manually published and stored by secondary and postsecondary education institutions. The transfer articulation agreements covered all types ranging from program-to-program to general agreements and were presented in various formats. If a student could easily access and follow these agreements, they become "treasure maps" that offer gold at the end of the hunt.

AcademyOne staff cataloged, coded and uploaded the articulation agreements to facilitate online search and comparison. These manual transfer and articulation agreements (PDF or Word Files) can be classified as course-to-course equivalency checklists. They represent the recognition and

¹ Banner, Colleague, PowerCampus, Jenzzabar, Campus Management and PeopleSoft

movement by institutions and states in response to market pressure, economics and in some cases, state legislation passed to make transfer pathways more transparent. On a macro scale, I estimate that our nation has invested well over two billion dollars developing and publishing college transfer and articulation agreements over the last five years. Federal agencies, states, industry partnerships and foundations mostly fund these efforts with little or no emphasis on augmenting the standalone student information systems, which were never designed to manage them. This provides you some insight into why most transfer articulation agreements are treated more like marketing materials rather than student advising support resources.

Even when college transfer and articulation agreements are published, students still need to see their academic and career advisors prior to taking courses so they can design and modify their academic plan.

Most of us remember a few years ago what it was like trying to navigate roads we had never before traveled. I can't tell you how many times my wife would ask me to stop and just ask for directions instead of fumbling with a paper map. Some of us have an innate sense of direction. Not me. I am directionally impaired. Reading maps and trying to discern how best to go from where we were to where we wanted to be was often met with a great deal of stress and anxiety. We wasted time, gas and some self-esteem. All of us have been there at some point in our lives.

Technology has addressed some of the road travel challenges, at least for those that can afford GPS² tools and use them with success. This did not happen overnight, and took years to evolve. Government funded initiatives and market forces helped shape GPS solutions. Remember GPS is a derivative technology from U.S. government satellites, which simplifies

² Global Positioning Systems

navigation and supports mobility. With the evolution of search engines like Yahoo, Bing and Google, we are able to map online destinations from local restaurants to hotels and even colleges that we may seek to visit and enroll.

Pennsylvania, South Carolina, Tennessee, Utah, Texas, Delaware and Florida are states that employ AcademyOne's technology platforms to serve statewide initiatives instead of home growing their own solutions. I have attached several state summary briefs to this written testimony.

AcademyOne has pioneered the replacement of paper based articulation methods used by colleges and universities where academic departments, that span institutional offerings, create and attempt to sustain college transfer pathways manually. This approach involves publishing course-to-course applicability rules; syndicating transfer options to partner institutions; tracking course changes; redesigning programs; assessing student learning sources and checking academic progress through seamless online tools. Much like the integrated GPS in our car dashboard, our tools determine where a learner begins and guides them on their best path to completing their degree. Just as the GPS breaks down travel into steps, our tools suggest clear pathways that are proven to be far less costly than using open-ended course catalogs for random course equivalency decision making.

Our collection of millions of course equivalencies published by various institutions came about so that students could compare their prior learning with what institutions have already shown that they would accept. In the process, we learned a great deal about consolidating and simplifying the intricacies of college transfer information. We augmented the CollegeTransfer.Net website with functions allowing students and advisors to securely compile their academic history to help them find transfer friendly institutions and their best options. Our tools create online transfer maps and guides generated on behalf of participating institutions that share their

academic policies based on the rules that govern how their academic departments would accept learning outside their instructional curriculum.

The state-based web portals and smart phone apps we power syndicate the resources created by institutions to reduce duplication, which in turn assists the contemporary learner by providing them with access to technology-based information that saves them time and effort.

By definition, a contemporary learner may attend more than one institution. They might work full-time and can only take courses part-time. They can be unemployed, a single parent, career changer or a returning military person looking to transition their life experiences into a new career. By automating the methods contemporary learners can use to petition for college credit supported by various sources of learning before they enroll, not after, institutions are afforded the opportunity to better assess students and place them in pathways best suited for their aptitudes and interests.

It has not been easy to overcome institutional bureaucracy. In some institutions, students will have to wait months after enrolling to learn what courses they have previously taken will be accepted and applied to their degree. Or, they might learn that the institution denied transfer credit for similar courses because the course was differentiated subjectively rather than by validating learning outcomes. Students experienced (and continue to experience) what has been coined "transfer shock" when their prior learning, that was initially thought to be acceptable and applicable, turns out to be non-transferable to their major or degree.

Hidden college transfer churn results in the average transfer student taking more than an additional semester of credits to graduate. They must redirect their efforts to newly discovered requirements. Millions of students transfer annually, which means they spend billions on courses that were not counted towards graduation. This is what I call the "transfer tax," and it can add

10% to the cost of attaining an undergraduate degree. If we could reduce the churn, we obviously can save billions of dollars while improving the efficiency of the educational ecosystem and enable more students to pass through the halls of academia. This savings can also mean lowering student loan indebtedness, reducing the cost of federal student aid, opening up aid to other students in need and reducing institutional administrative costs.

As a major industry sector, education is diverse and decentralized. In general, not everyone in postsecondary education has come to recognize the need to adapt and transform to the new paradigm of contemporary learning. Whether learning takes place in the classroom, via a hybrid course, with a self-paced MOOC³, learning on the job or through volunteer effort, each is an important piece of the academic engine linked to knowledge and skill creation through research, shared experiences and credentialing through assessment. The business models fueling the education sector are responding to new market conditions.

As we place trust in our institutions and acknowledge that they are not all alike, then we must focus in on what makes them different. Like roads, we have various types and can be local, state and interstate. Just like the landscape along each road is unique, so are our institutions. As we recognize the importance of mobility, no one questions the need to support them. In this vein, we need to recognize that education is not an end to itself, but a lifelong process as we strive to improve our chances of making a better life and contribute to society. In doing so, we make our country, states and local regions more competitive and able to adjust to future market forces and challenges.

The challenge, as individual institutions come together through collaboration stimulated by governmental and/or foundational initiatives or by economic

³ Massive Online Open Courses

reason, is how to get all institutions to come to terms with how best to address the diversity of contemporary learners in a 21st century world that is no longer bound by distance or language or currency. AcademyOne is making a difference by leveraging and expanding our technology infrastructure and developing the bridges to support a more mobile learning experience, and we are seeing major improvements worth noting.

I see six challenges to improve and modernize the process of transfer of credit. A summary of each follows at the end of this written testimony entitled Transformative Examples.

- **Challenge #1:** Embrace and reinforce academic freedom while adopting online proactive methods to enable students to take their prior learning credits with them.
- **Challenge #2:** Replace the paper based “treasure maps” that very few students actually can and do follow with accurate, real-time information that helps each student check their transfer pathway and progress between “sender” and “receiver.”
- **Challenge #3:** Improve the accuracy of transfer information.
- **Challenge #4:** Recognize the need for collaboration, sharing and trust between institutional partners to avoid duplication of effort.
- **Challenge #5:** Continue to stimulate and foster the collaboration of likeminded institutions by which the federal government, states and foundations have been catalysts for change.
- **Challenge #6:** Publish what is common and what is different about institutions and their programs.

After the six challenges, attached are examples of CollegeTransfer.Net and TransferCheck. This provides a visual of what the tools look like and how they can be used to facilitate the transfer process to provide timely, accurate information to students and institutions.

To summarize, AcademyOne works with states and institutions committed to investing in building sustainable, sharable and networked technologies that simplify and streamline college completion initiatives and effort; at the same time, lowering costs, time to completion and resources expended to earn a degree. It is hard work. The fruit of our labor and ingenuity is a shining beacon of what working together can accomplish as we serve national, regional, state and local objectives.

Addressing and meeting the needs of contemporary learners is an important issue as we expand the opportunity for more and more people to access and successfully participate in postsecondary education. The diversity of students, by age and experience are telling signs that we are seeing the U.S. higher education sector responding to calls for action on both a macro and micro scale.

Growing access is also coupled with recognizing and respecting prior learning investment. Escalating cost of tuition and fees ever-increasing amount of college student debt, and unacceptable completion and graduation rates show, we need to continue to stimulate and invest in sharing technology services, standardize their delivery and scaling them to serve a greater portion of the secondary and postsecondary education ecosystem.

Our nation has the skill, ability, knowledge and experience to apply technology to improve the access to data and information to make better decisions, provide better guidance, and accelerate a student's opportunities. Existing technologies and software can be used if institutions recognize the benefits and cost savings of collaboration and sharing systems, applications and processes. If we are to regain our place as first in the world in college graduation, we need to utilize shared technologies to accelerate our efforts. All the while, we must make it easier for students to petition for credit for prior learning and for institutions and academic departments to leverage their assessments of prior learning to better advise contemporary learners.

The big question is not how can we get our nation's postsecondary education system to accept and utilize shared technology platforms to be more efficient, effective, and successful – **but when?**

Again, I want to thank Chairman Kline and the Committee for the invitation and opportunity to testify before the full Committee. I am available to answer any questions and be of assistance to members of the Committee including providing examples of the software if they are interested.

Transformative Examples

As a result of AcademyOne's work pioneering CollegeTransfer.Net, and working with a variety states and institutions across the country, we have gained a unique perspective of the education ecosystem striving to achieve national, regional, state and local impact. The secondary and postsecondary education ecosystem is undergoing a transformation as it continues to shift and serve traditional, nontraditional and contemporary learners.

Institutions, no doubt are transforming and improving how they serve contemporary students. Here are six challenges including examples of addressing each challenge:

Challenge #1: Embracing and reinforcing academic freedom while adopting online proactive methods to enable students to take their prior learning credits with them. Generally, institutions delegate the reactive transcript evaluation process to the Admissions or Registrar's Office using minimal course descriptions, credit units and perception of the institution source as the means of determining course comparability. In Pennsylvania, the Department of Education launched an academic oversight committee of faculty representatives that built a foundation of coursework by defining learning outcomes documented in AcademyOne's online workflow. Faculty then reviewed course syllabi to align learning outcomes with feedback steps between institutions. This removed the standalone and isolated institutional practice of evaluating the same courses by student over and over again. It also eliminated the unintended consequence of giving credit to some, while not giving it to others. With the framework of courses published and syndicated to all participating institutions, institutions save time and effort by reducing course assessment efforts while giving contemporary students transfer assurances not over-ridden by academic departments after they enroll or change major. In 2009 alone, the State estimated that the transfer

framework saved students \$35.4 million in tuition and fees by freeing seat time and reducing the administrative burden of assessing the majority of courses transferred between institutions.

Challenge #2: Replace the paper based “treasure maps” that very few students actually can and do follow with accurate, real-time information that helps each student check their transfer pathway and progress between “sender” and “receiver.” Community colleges are often “feeders” to four-year institutions recruiting students. Many students never finish their associate degree, and as a result the transfer agreements they may have been following are voided. Complicating it further, transfer students often change their program of study and lose credits because course requirements are different or they have lost track of what they have to take. Delaware County Community College uses a tool called TransferCheck that helps each student explore transfer pathways by checking progress real-time. Students can experiment with different transfer pathways, share their plans with an advisor and register for appropriate coursework instead of taking courses that will not count toward the agreement. Further, the institution has reinforced the value of their investment in creating transfer articulation agreements.

Challenge #3: Improve the accuracy of transfer information. Often, colleges and universities cautiously display articulation agreements and course equivalencies on their websites from a standalone perspective because the data is so hard to keep up-to-date. Pennsylvania was one of the first states AcademyOne partnered with to help establish a statewide portal consolidating and managing real-time transfer information, while syndicating the cleansed data that spanned all types of participating institutions. Students, no matter where they turn, can find how their credits will transfer and follow guaranteed transfer requirements of the participating institutions. South Carolina, Utah and Delaware have followed suit, helping their contemporary students find accurate transfer guides and maps. Texas

launched the GradTX portal, specialized to help address the millions of adult learners who earned college credit but never completed their college credential. Working with a subset of Texas institutions, the Texas Higher Education Coordinating Board is using market drivers to foster institutional cooperation. This has resulted in a shared resource referenced across the various admissions offices. Other states are duplicating these efforts including Arizona, Georgia, Massachusetts, Connecticut, North Carolina, New York, Ohio, Illinois, Indiana, Kentucky, Oregon, Washington and California. Some are building in-house systems and others working with companies like AcademyOne to leverage the evolving best practices shared commercially.

Challenge #4: Recognize the need for collaboration, sharing and trust between institutional partners to avoid duplication of effort. Institutions spend between 4% and 8% of their operating budget on IT, mostly on standalone departmental systems. States like Florida are creating shared platforms for all institutions through the Florida Virtual Campus (FLVC). Institutions choose to participate and leverage tools and services they can't individually afford to do on their own. The institutions benefit by offering and recognizing equivalent courses. FLVC has taken the next step by providing an online platform for students who wish to take courses from "in-network" participating schools and creating a broader marketplace for institutions and students. The student is better able to stay on their path to completion if they are enrolled in one institution can take a course online at another that may be full or not offered during a given semester at their current school.

Challenge #5: Continue to stimulate and foster the collaboration of likeminded institutions by which the federal government, states and foundations have been catalysts for change. The economics and underlying business model are driving the development of shared services institutions have in common. In Tennessee, with funding from foundations such as

Lumina and Kresge, AcademyOne is working with members of the State's higher educational governing bodies to develop a proactive reverse transfer system. This system will suggest awarding associate degrees to currently enrolled four year students who have amassed 60 or more credits and transferred from an in-state community college before completing their associate's degree. In Pennsylvania with funding from the federal government's TAACT grant, through the U.S. Department of Labor's Employment and Training Administration, AcademyOne is working with the State's fourteen community colleges to develop a shared prior learning assessment platform whereby unemployed and underemployed workers can be targeted and served. Students will be able to petition for academic credit to be awarded for their life experiences and career training to get a jump-start on earning a new college credential that can help them re-enter the workforce or advance their current career paths.

Challenge #6: Publish what is common and what is different about institutions and their programs. It is not enough to catalog courses and advertise them. Systems can be employed to help highlight and recognize why programs and courses are different. Learning outcomes are shared and extrapolated by learners giving rise to personal adaption and what they take away from their accomplishments. In South Carolina, not only do they consolidate and share transfer information keeping it refreshed and synchronized, their institutions are augmenting simulated transfer degree audits empowering students to check their progress to a specific degree program through two or more institutions. This consolidation helps reduce the burden on institutions, while improving the services designed to serve contemporary learners proactively.

"Will My Credits Transfer?" on PATrac.org

The screenshot shows the PA TRAC homepage. At the top left is the logo for the Pennsylvania Transfer and Articulation Center. To the right is a search bar with "Google Custom Search" and buttons for "Register" and "Login". Below the logo is a navigation menu with links for HOME, STUDENT, FACULTY & ADVISORS, ADMINISTRATORS, and ABOUT PA TRAC. The main banner features a photo of three smiling students and the text "TAKE YOUR CREDITS WITH YOU." followed by "START PLANNING YOUR COLLEGE TRANSFER TODAY". Below the banner are five main navigation categories: "Participating Colleges" (with a building icon), "Transfer Courses" (with a paper airplane icon), "Transfer Degrees" (with a telescope icon), "Plan Your Transfer" (with a building icon), and "Find A Transfer Event" (with a calendar icon). On the right side, there is a "Quick Links" section with a list of links: "Participating PA TRAC Colleges", "Search for Equivalencies", "Plan Your Transfer", "Transfer Courses", "Transfer Degrees", "Resources for Veterans", "FAQ", and "Find a Transfer". At the bottom of the main content area, a paragraph states: "The Pennsylvania Transfer and Articulation Center (PA TRAC) enables students to easily identify courses and degrees that transfer to the participating colleges and universities."

The screenshot shows the profile page for Slippery Rock University of Pennsylvania on the PA TRAC website. The header is identical to the previous screenshot. The main banner features a photo of students and the text "COLLEGE PROFILES". Below the banner, the university's name "Slippery Rock University of Pennsylvania" and location "Slippery Rock, PA" are displayed, along with the university's logo. A row of four statistics is shown in dark blue boxes: "Public" (4 year), "8,000" (Full + Part time Students), "1:20" (Faculty to Student Ratio), and "0%" (Transfer Student Ratio). Below the statistics is a photo of four students celebrating on a rock wall. To the right of the photo is a text block: "Transfer to a Rock Solid Monumental Future at Slippery Rock University! SRU is a proud member of the Pennsylvania State System of Higher Education, and one of the 'Best in the Northeast', as rated by The Princeton Review in their '2013 Best Colleges: Region by Region.' Located in Western Pennsylvania one hour north of Pittsburgh, SRU offers more than 150 academic programs and a variety of academic, cultural, and social opportunities. Read more about the Rock Solid Transfer Advantage and what SRU can do for you!" Below this text is the statement "Over 71,500 courses transfer into Slippery Rock University of Pennsylvania". At the bottom right, there is a dark blue button with the text "Will my credits transfer?" and a right-pointing arrow icon.


pennsylvania
 TRANSFER AND ARTICULATION CENTER

[HOME](#)
[STUDENT](#)
[FACULTY & ADVISORS](#)
[ADMINISTRATORS](#)
[ABOUT PA TRAC](#)

WILL MY CREDITS TRANSFER - WELCOME

Will my credits transfer to Slippery Rock University of Pennsylvania?

See how your previous coursework may transfer to Slippery Rock University of Pennsylvania, allowing you to save time and money by earning your degree faster.


Enter coursework from a college or university
 Add coursework you have taken at other colleges or universities to see how they may transfer to Slippery Rock University of Pennsylvania.


Enter credit by exam
 Add Advanced Placement (AP), College Level Examination Program (CLEP), DANTES Subject Standardized Tests (DSST) and International Baccalaureate (IB) exams to see how they may transfer for credit at Slippery Rock University of Pennsylvania.

Already have your course history saved in your PA TRAC account?

[Home](#) | [Student](#) | [Faculty & Advisors](#) | [Administrators](#) | [About PA TRAC](#)

Quick Links

- Participating PA TRAC Colleges
- Search for Equivalencies
- Plan Your Transfer
- Transfer Courses
- Transfer Degrees
- Resources for Veterans
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WILL MY CREDITS TRANSFER - MAP

My Transfer Map to Slippery Rock University of Pennsylvania

The Transfer Map below shows how your coursework may transfer to Slippery Rock University of Pennsylvania.

- Add to your Transfer Map. Use the buttons below to add coursework from another institution and/or credit by exams.
- Save your Transfer Map. Create a personal PA TRAC account to save your Transfer Map, compare transfer options and share your information with colleges that interest you.

Westmoreland County Community College  Change

Taken Course (Grade)		Slippery Rock University of Pennsylvania	
✓	ENG 161 College Writing (A)	3.0 cr	⇨ ENGL 101 Introduction to College Writing 3.0 cr
✓	MTH 158 Precalculus Mathematics (A)	3.0 cr	⇨ MATH 125 Precalculus 4.0 cr
✓	SOC 155 Principles of Sociology (B)	3.0 cr	⇨ PROF 201 Principles of Sociology 3.0 cr
✓	CHM 155 General Chemistry I (A)	4.0 cr	⇨ CHEM 107 General Chemistry I 3.0 cr

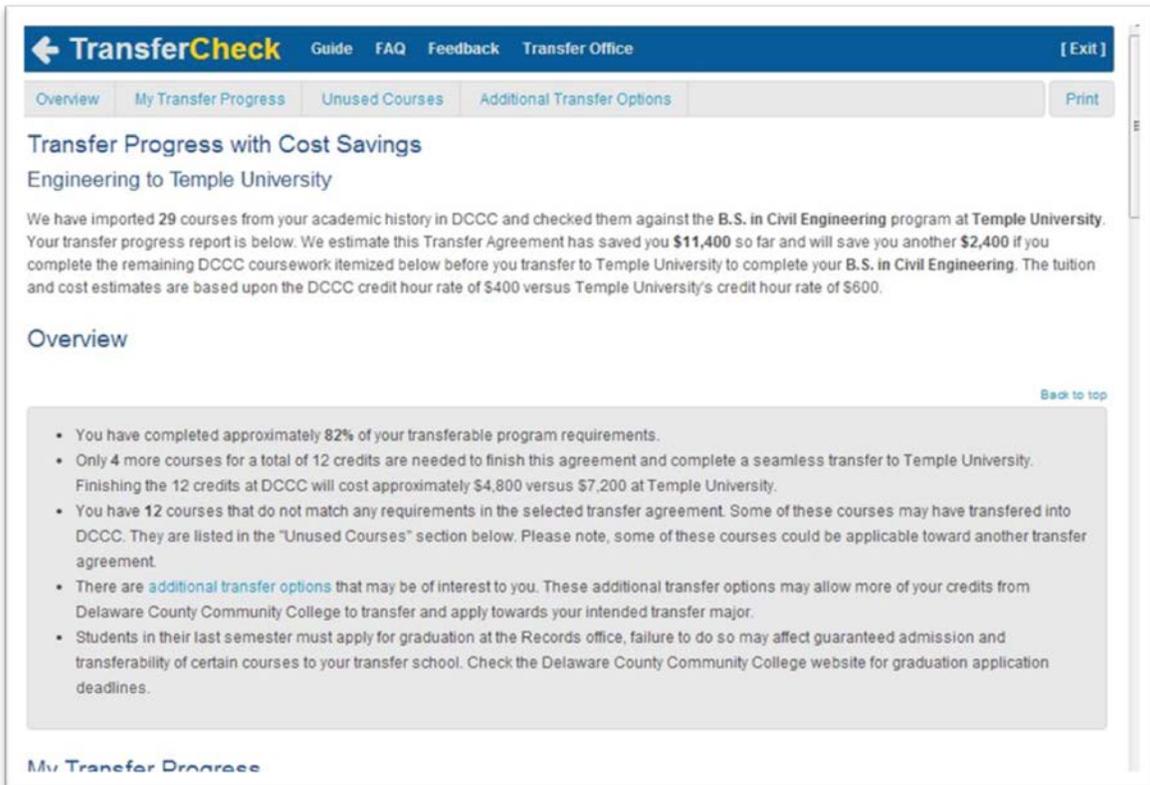
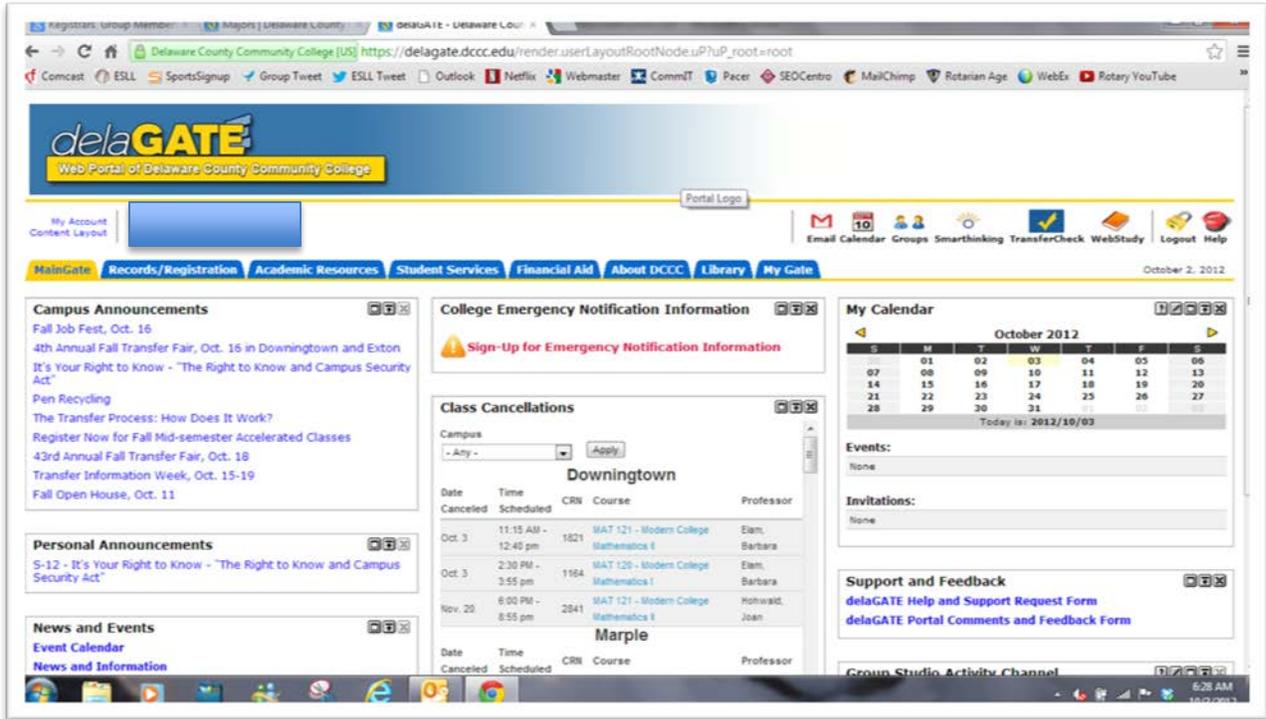
My Account

- My Profile
- My Course History
- My Equivalency Maps
- Share My Information
- My Messages
- My Storage Center

Quick Links

- Participating PA TRAC Colleges
- Search for Equivalencies
- Plan Your Transfer
- Transfer Courses
- Transfer Degrees
- Resources for Veterans

TransferCheck Replacing the "Treasure Maps"



My Transfer Progress

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First Semester

✓ CHE 110 - General Chemistry I Matched: CHE 110 (4.0 cr, A)	4.0
✓ DPR 108 - Introduction to Computer Science Matched: DPR 108 (3.0 cr, C)	3.0
✓ ENG 100 - English Composition I Matched: ENG 100 (3.0 cr, B)	3.0
✓ MAT 160 - Calculus I Matched: MAT 160 (5.0 cr, B)	5.0
✓ Humanities Elective Matched: PHI 100 (3.0 cr, B)	3.0

18.0 of 18.0

Temple University Equivalency

CHEM 1031/1033 - General Chemistry I & Lab	4.0
CIS - Lower Level Elective	3.0
ENG 1002 - College Composition	3.0
MAT 1041 - Calculus I	5.0
Meets Core	3.0

18.0

Second Semester

✓ CHE 111 - General Chemistry II Matched: CHE 111 (4.0 cr, A)	4.0
✓ EGR 150 - Engineering Topics Matched: EGR 150 (1.0 cr, B)	1.0
✓ ENG 112 - English Composition II Matched: ENG 112 (3.0 cr, A)	3.0
✓ MAT 161 - Calculus II Matched: MAT 161 (5.0 cr, B)	5.0
✓ PHY 131 - University Physics I Matched: PHY 131 (4.0 cr, A)	4.0

17.0 of 17.0

Temple University Equivalency

CHEM 1032/1034 - General Chemistry II & Lab	4.0
ENGR 1101 - Introduction to Engineering	1.0
ENGL 2796 - Writing the Research Essay	3.0
MATH 1042 - Calculus II	5.0
PHYS 1061 - Elementary Classical Physics I	4.0

17.0

Third Semester

✓ EGR 100 - Engineering Graphics ¹ Matched: EGR 100 (3.0 cr, C)	3.0
<input type="checkbox"/> EGR 200 - Engineering Mechanics I	3.0
✓ MAT 260 - Calculus III Matched: MAT 260 (3.0 cr, A)	3.0
✓ PHY 132 - University Physics II Matched: PHY 132 (4.0 cr, B)	4.0
✓ Social Science Elective Matched: HIS 110 (3.0 cr, C)	3.0

Temple University Equivalency

ENGR 1117 - Engineering Graphics	3.0
ENGR 2331 - Engineering Statics	3.0
MATH 2043 - Calculus III	3.0
PHYS 1062 - Elementary Classical Physics II	4.0
Meets Core	3.0

3.0

Matched: PHY 132 (4.0 cr, B)			
<input checked="" type="checkbox"/>	Social Science Elective Matched: HIS 110 (3.0 cr, C)	3.0	Meets Core 3.0
		13.0 of 16.0	16.0
Fourth Semester		Temple University Equivalency	
<input type="checkbox"/>	EGR 201 - Engineering Mechanics II ¹	3.0	ENGR 2332 - Dynamics 3.0
<input checked="" type="checkbox"/>	MAT 261 - Differential Equations Matched: MAT 261 (3.0 cr, C)	3.0	MATH 3041 - Differential Equations 3.0
<input checked="" type="checkbox"/>	Social Science Elective Matched: PSY 140 (3.0 cr, A)	3.0	Meets Core 3.0
<input checked="" type="checkbox"/>	Humanities Elective Matched: SPE 100 (3.0 cr, A)	3.0	Meets Core 3.0
<input type="checkbox"/>	Additional Humanities or Social Science Elective ² View Choices	3.0	Meets Core 3.0
		9.0 of 15.0	15.0
Recommended Additional Course		Temple University Equivalency	
<input type="checkbox"/>	EGR 220 - Thermodynamics ³	3.0	Meets Core 3.0
		0.0 of 3.0	3.0
Totals:		57.0 of 69.0	69.0

1. EGR 100 and EGR 201 must be completed at DCCC BEFORE transferring into the Civil Engineering major at Temple.

2. An additional social science and/or humanities course is required beyond the A.S. in Engineering for Core-to-Core transfer to Temple for a total of 5 courses in the humanities and/or social sciences.

3. EGR 220 may also be completed at DCCC as an "additional" required course for the Civil Engineering major at Temple.

Unused Courses

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The course(s) below did not match any of the requirements for this transfer agreement. These courses may satisfy graduation requirements for your major at Delaware County Community College and may be transferable. To determine courses that apply towards graduation, [please review your CAPP](#). Alternatively, you may check with a transfer advisor if necessary.

DPR 100 (3.0 cr, A)	EGR 100 (0.0 cr, A)	ENG 112 (0.0 cr, D)	ENG 112 (0.0 cr, F)
INT 100 (3.0 cr, A)	MAT 120 (3.0 cr, A)	MAT 121 (3.0 cr, A)	MAT 140 (3.0 cr, A)
MAT 141 (3.0 cr, B)	MAT 200 (3.0 cr, A)	MAT 210 (3.0 cr, T)	PSY 110 (3.0 cr, C)

My Transfer Progress

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First Semester

Temple University Equivalency

<input checked="" type="checkbox"/> ENG 100 - English Composition I Matched: ENG 100 (3.0 cr, C)	3.0	ENGL 0802 - Analytic Reading & Writing	3.0
<input checked="" type="checkbox"/> Mathematics Elective RECOMMENDED: MAT 110 - Technical Mathematics I ² Matched: MAT 140 (3.0 cr, C)	3.0	MATH L000 - Lower Level Elective	3.0-5.0
<input type="checkbox"/> TCC 111 - Technical Communication ¹	3.0	ENGR 1101 - Introduction to Engineering & Engineering Technology	3.0
<input type="checkbox"/> TCC 112 - CADD Graphics ¹	3.0	ENGR 1117 - Engineering Graphics	3.0
<input type="checkbox"/> TCS 100 - Construction Blueprint Reading ¹	3.0	ET - Technical Elective	3.0

6.0 of 15.0-17.0

15.0-17.0

Second Semester

Temple University Equivalency

<input type="checkbox"/> Mathematics Elective RECOMMENDED: MAT 111 - Technical Mathematics II ² View Choices	3.0-5.0	MATH L001 - Lower Level Elective	3.0-5.0
<input checked="" type="checkbox"/> PHY 100 - Technical Physics ^{1,3} Missed Criteria: PHY 100 (3.0 cr, CP) Grd	3.0	PHYS 1011 - College Physics I	3.0
<input type="checkbox"/> TCC 121 - Project	3.0	CCET 3322 - Construction	3.0



pathways.academyone.c

