Jackalope
Unicorn Pegasus
Whitewalkers
Connecting What’s Possible

- SLO Performance Management
- Data Analytics
- Program Review
- Curriculum Management
  (Program & Course Rules)
- Degree Audit
- Ed Planning
- On-line Catalog
- Student Engagement
  (ePortfolios, Extended Transcripts, Badging)
- Guided Pathways
Jim Thorpe
A Clear Picture is Emerging

SIS
SIS Org and Offerings needs to match real life

Curriculum
Course and Program Developed around Competencies/Outcomes.

Assessment
Accreditation, yes: but also badging, workforce, early alert—we need to know how students, not just courses, are doing.

Program Planning & Review
Continuous Improvement needs to become truly continuous to Co-Remediation
Assessment connected to directed learning activities and student services

Catalog
Catalog needs to be accurate and reflect Curriculum changes

Ed Planning
Ed Planning system needs to be fed by Curriculum and alert students when decisions or changes affect their plan

Degree Audit
Institution needs to know the what why and how many of Ed Plans and the impact to the institution.

Skills Transcript
Visibility for the student of what he has learned and skills
Data Jenga

Faculty assesses SLOs that were changed a year ago.
Data Jenga

MIS data reported to the CCCCCO is inaccurate because curricular change was never made in SIS.
Data Jenga

New program took over 6 years to get through the approval process. The industry requirements have changed.
Data Jenga

Program change did not make it to the Catalog
Data Jenga

Education Planning information hasn’t been updated in over a year
Data Jenga

The data in Curriculum System, COCI and SIS do not match what is actually being offered.
Data Jenga

Program resource requests are not fulfilled for two years and mandates have changed.
Data Jenga

Canvas SLOs and rubrics do not match any departmental SLOs, assessment scales, or descriptors.
Data Jenga

Guided Pathways effectiveness cannot be tracked or assessed because students weren’t
There’s a Better Way to Do This:

- Curriculum and Assessment Management are One System
- Course-Embedded Assessment is the “Future Present”
- Compliance shouldn’t take a front seat to Performance—for either the institution or the student
A Clear Picture is Emerging
# MATH100 Default CSLO Assessment

**Assessment Type**  
Default Course-Ending Assessment

**Assessment Description**  
MATH100 Default CSLO Assessment

<table>
<thead>
<tr>
<th>SLO</th>
<th>Exceeds expectations</th>
<th>Meets expectations</th>
<th>Does not meet expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH100 SLO 1: Students will solve algebraic equations.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>MATH100 SLO 2: Students will use the order of operations to solve arithmetic and algebraic expressions</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>MATH100 SLO 3</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>MATH100 SLO 4: Students will correctly solve equations and expressions using fractions, decimals, polynomials, and roots.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>MATH100 SLO 5: Students will solve mathematical problems algorithmically, visual-spatially, and logically.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SLO</th>
<th>Exceeds expectations</th>
<th>Meets expectations</th>
<th>Does not meet expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH100 SLO 1: Students will solve algebraic equations.</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>MATH100 SLO 2: Students will use the order of operations to solve arithmetic and algebraic expressions</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>MATH100 SLO 3</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
Send SLOs to Canvas

MATH100 - Mathematics for General Education - 2017f-015-100-001

Course Coordinator(s): Joan Neilson, Marianna Padilla
Evaluator(s): Marianna Padilla

MATH100 Default CSLO Assessment

MATH101 - College Algebra - 2017f-015-101-001

Course Coordinator(s): Marianna Padilla
Evaluator(s): Marianna Padilla
Send SLOs to Canvas

Send Outcomes To LMS

This process will send the Outcomes of MATH100 Default CSLO Assessment to a Course in Canvas.

Select a Course:

- -- Select a canvas Course --
  - College Algebra
  - Introduction to Programming
  - MATH100 - CASD - TEST1
  - MATH100 - CASD - TEST2
  - MATH100 - Test Beetle1
  - MATH102 - Applied Calculus I
  - MATH250 - Analytic Geometry and Calculus I
  - PSY101

<table>
<thead>
<tr>
<th>SLO</th>
<th>Performance Descriptors</th>
<th>Student met the minimum expectation on the outcome or criteria</th>
<th>Student does not meet the minimum expectations on the outcome or criteria, but is developing proficiency</th>
<th>Student does not meet the minimum expectations on the outcome or criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH100 SLO 1: Students will solve algebraic equations.</td>
<td>3 points</td>
<td>2 points</td>
<td>1 points</td>
<td>0 points</td>
</tr>
<tr>
<td>MATH100 SLO 2: Students will use the order of operations to solve arithmetic and algebraic expressions</td>
<td>4 points</td>
<td>3 points</td>
<td>2 points</td>
<td>1 points</td>
</tr>
<tr>
<td>MATH100 SLO 3</td>
<td>4 points</td>
<td>3 points</td>
<td>2 points</td>
<td>1 points</td>
</tr>
</tbody>
</table>
Canvas Rubrics

MATH101 Default CSLO Assessment

Due | For | Available from | Until
--- | --- | --- | ---
- | Everyone | - | -

**Points** 26

**Submitting** a text entry box

MATH101 Default CSLOs
You've already rated students with this rubric. Any major changes could affect their assessment results.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Ratings</th>
<th>Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>📖 MATH101 SLO 1: Solve various algebraic equations. View longer description threshold: 2.0 pts</td>
<td>4.0 pts With greater than 80% accuracy, students can solve various algebraic equations. 3.0 pts With less than 80% accuracy, students can solve various algebraic equations. 2.0 pts With less than 60% accuracy, students can solve various algebraic equations. 1.0 pts With less than 40% accuracy, students can solve various algebraic equations. 0.0 pts With less than 20% accuracy, students can solve various algebraic equations.</td>
<td>4.0 pts</td>
</tr>
</tbody>
</table>

| 📖 MATH101 SLO 2: Demonstrate the value of... | 4.0 pts With greater than 80% accuracy, students can demonstrate the value of... 3.0 pts With less than 80% accuracy, students can demonstrate the value of... 2.0 pts With less than 60% accuracy, students can demonstrate the value of... 1.0 pts With less than 40% accuracy, students can demonstrate the value of... 0.0 pts With less than 20% accuracy, students can demonstrate the value of... | 4.0 pts |
## Canvas Speed Grader

This student does not have a submission for this assignment

<table>
<thead>
<tr>
<th>MATH101 Default CSLOs</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH101 SLO 1: Solve various algebraic equations.</td>
<td>With less than 80% accuracy; students can solve various algebraic equations. 3 / 4.0 pts</td>
</tr>
<tr>
<td>MATH101 SLO 2: Demonstrate the value of elementary graphing techniques.</td>
<td>With greater than 80% accuracy; students can demonstrate the value of elementary graphing techniques. 4 / 4.0 pts</td>
</tr>
<tr>
<td>MATH101 SLO 3: Use theorems of algebra to analyze the zeros of polynomials.</td>
<td>With greater than 80% accuracy; students can use theorems of algebra to analyze the zeros of polynomials. 4 / 4.0 pts</td>
</tr>
<tr>
<td>MATH101 SLO 4: Understand and apply exponential and logarithmic functions.</td>
<td>With less than 80% accuracy; students can understand and apply exponential and logarithmic functions. 3 / 4.0 pts</td>
</tr>
</tbody>
</table>

Total Points: 14 out of 16.0

Assignment Comments
Import Scores back to eLumen

Import Scores from LMS

This process will import Outcome Results from the following Canvas Account

Account name: eLumen

Select a Course: MATH100 - CASD - TEST1

Course Code: 2016sp-015-100-001

Select from the following LMS Assignments:
Displaying only students that match the section's 2017f-015-100-001 roster

<table>
<thead>
<tr>
<th>Lms Assignment</th>
<th>Points Possible</th>
<th>Enrolled Students</th>
<th>Total Graded</th>
<th>Import these Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcomes assessment</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>Import these Scores</td>
</tr>
<tr>
<td>MATH100 - CASD - TEST1 - 3PSLO</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>Import these Scores</td>
</tr>
<tr>
<td>MATH100 - CASD - TEST1 - 1ISLO</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>Import these Scores</td>
</tr>
</tbody>
</table>
Population Modeling Project

Students will use exponents and logarithms to model population rises and falls for a small ecosystem.

Directed Learning Activities:
Exponents DLA

Results

MATH101 SLO 4: Understand and apply exponential and logarithmic functions.

<table>
<thead>
<tr>
<th>Graphs Exponents</th>
<th>Exceeds expectations</th>
<th>Meets expectations</th>
<th>Does not meet expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student exceeded the minimum expectations on the outcome or criteria</td>
<td>Student met minimum expectations on the outcome or criteria</td>
<td>Student did not meet expectations on the outcome or criteria</td>
</tr>
<tr>
<td>Graphs Logarithms</td>
<td>Student exceeded the minimum expectations on the outcome or criteria</td>
<td>Student met minimum expectations on the outcome or criteria</td>
<td>Student did not meet expectations on the outcome or criteria</td>
</tr>
<tr>
<td>Applies exponents in population model</td>
<td>Student exceeded the minimum expectations on the outcome or criteria</td>
<td>Student met minimum expectations on the outcome or criteria</td>
<td>Student did not meet expectations on the outcome or criteria</td>
</tr>
<tr>
<td>Applies logarithms in population model</td>
<td>Student exceeded the minimum expectations on the outcome or criteria</td>
<td>Student met minimum expectations on the outcome or criteria</td>
<td>Student did not meet expectations on the outcome or criteria</td>
</tr>
</tbody>
</table>

Comments

[Comment Text Area]
Terry Glover  
Nursing, ADN

Career Goals

Your portfolios

Career Goals

Introduction

Professional Development

RN Coursework Related Credentials

+ Create new Portfolio

Large urban hospital. I would like to start by working as a floor nurse to gain valuable skills and experience and once I am confident in eventually want to be the CNS of the department supporting the department's care of patients and helping determine protocols and care we provide.

Relatively close to the bedside. Above all else I love directly caring for patients and I chose the CNS pathway because it would keep me different places as nursing has so many opportunities. I specialized in adult acute care so I would like to stay within that area of focused on developing my skills and abilities as a nurse and to provide excellent bedside care. I also am focusing on developing my transition into the CNS role.
### Computer Science, AS

#### Terms

**Fall 2017**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Applies to Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH251 - Analytic Geometry and Calculus II</td>
<td>3</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>COMPSCI108 - Computer Organization I</td>
<td>3</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>COMPSCI105 - Introduction to Java Programming</td>
<td>3</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**CSLO**

- COMPSCI105 SLO1: Demonstrate how an Object Oriented (OOP) functions. Not scored
- COMPSCI105 SLO2: Student will identify the different Java applet properties. Not scored
- COMPSCI105 SLO3: Demonstrate the different types of rendering methods when creating graphic elements Not scored

You have not enrolled in this course yet.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Grade</th>
<th>Applies to Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPSCI103 - Advanced Programming</td>
<td>3</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>COMPSCI104 - Structures of Data</td>
<td>3</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Why Choose Computer Science?

What Can I Learn?
Computer science programs include topics such as:
- Computer theory
- Computer system design
- Computer development and programming
- Computer applications

Careers In Computer Science

Top Five Jobs

<table>
<thead>
<tr>
<th>Software Developer</th>
<th>Computer Systems Analysts</th>
<th>Computer Network Architects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>82,500</td>
<td>75,000</td>
</tr>
<tr>
<td>Annual Openings</td>
<td>3,290</td>
<td>3,640</td>
</tr>
<tr>
<td>Average Salary</td>
<td>$106,860</td>
<td>$87,220</td>
</tr>
<tr>
<td>Competition</td>
<td>▼ 17%</td>
<td>▼ 8%</td>
</tr>
<tr>
<td>Expected Growth</td>
<td>▲ 4%</td>
<td>▲ 14%</td>
</tr>
<tr>
<td>Skills</td>
<td>★ 12</td>
<td>★ 20</td>
</tr>
</tbody>
</table>

Learn More
Create An Ed Plan

Course Block
Recommended Sequence

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG110</td>
<td>BUS10</td>
</tr>
<tr>
<td>Composition and Reading</td>
<td>Management: An Introduction</td>
</tr>
<tr>
<td>MATH101</td>
<td>COMPSCI102</td>
</tr>
<tr>
<td>College Algebra</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>PSY101</td>
<td>CHEM100</td>
</tr>
<tr>
<td>Introduction to Psychology</td>
<td>Introduction to General Chemistry</td>
</tr>
<tr>
<td>CAR100</td>
<td></td>
</tr>
<tr>
<td>Career Services</td>
<td></td>
</tr>
</tbody>
</table>

Send To Advisor
Nursing, ADN

The Associate of Science Degree in Nursing (ADN) prepares entry-level Registered Nurses (RN) as providers of care across the health/illness continuum and as members within the profession. Upon successful completion of program requirements, graduates are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN), and are guaranteed transfer to the university BSN program.
### Nursing, ADN

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Mastery</th>
<th>Progress</th>
<th>Evaluator</th>
<th>Term</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td>Mastery</td>
<td>Progress</td>
<td>Evaluator</td>
<td>Term</td>
<td>Effective Date</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▶ Apply a variety of critical and creative strategies for solving complex problems.</td>
<td>Meets expectations</td>
<td>100.00%</td>
<td>Madeleine Quinn</td>
<td>Spring 2014</td>
<td>06/29/2015</td>
</tr>
<tr>
<td>NURS 057 SLO 2: Student performs a basic nursing physical assessment for a patient with a non-life threatening condition.</td>
<td>Exceeds expectations</td>
<td>Madeleine Quinn</td>
<td>Spring 2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 101 SLO 3: Presents and interprets graphs and tables using statistics and scientific analysis</td>
<td>Meets expectations</td>
<td>Madeleine Quinn</td>
<td>Spring 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 100 SLO 1: Apply the scientific method in the discipline of biology and demonstrating this comprehension by completing a single experiment.</td>
<td>Meets expectations</td>
<td>Madeleine Quinn</td>
<td>Spring 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 101 SLO 2: Describe the process of artistic creation in order to explore humanistic concerns.</td>
<td>Meets expectations</td>
<td>Madeleine Quinn</td>
<td>Fall 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LRC 001 SLO 3: Students will demonstrate problem solving/creative thinking ability by identifying the main points of discussion raised during the tutorial session to plan next steps in the writing process.</td>
<td>Meets expectations</td>
<td>Tran Vo</td>
<td>Spring 2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOL 100 SLO 3: Interpret, use, analyze and express ideas through equations, graphs, and diagrams</td>
<td>Meets expectations</td>
<td>Madeleine Quinn</td>
<td>Spring 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 268 SLO 3: Uses appropriate terminology through the critical analysis of films with a focus on their structure and related meaning.</td>
<td>Meets expectations</td>
<td>Madeleine Quinn</td>
<td>Fall 2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▶ Generate reasoned, well-organized arguments and/or conclusions.</td>
<td>Meets expectations</td>
<td>47.06%</td>
<td>Madeleine Quinn</td>
<td>Summer 2013</td>
<td>06/29/2015</td>
</tr>
<tr>
<td>▶ Analyze perspectives, arguments, or data.</td>
<td>Meets expectations</td>
<td>60.00%</td>
<td>Madeleine Quinn</td>
<td>Spring 2015</td>
<td>06/29/2015</td>
</tr>
<tr>
<td>▶ Synthesize perspectives, arguments, or data.</td>
<td>Meets expectations</td>
<td>100.00%</td>
<td>Madeleine Quinn</td>
<td>Spring 2015</td>
<td>06/29/2015</td>
</tr>
</tbody>
</table>
Guided Pathways

Four Pillars of Guided Pathways

Create clear curricular pathways to employment and further education.

Help students choose and enter their pathway.

Help students stay on their path.

Ensure that learning is happening with intentional outcomes.
Winter is Coming
A Clear Picture is Emerging

Curriculum
Course and Program Developed around Competencies/Outcomes.

Assessment
Accreditation, yes: but also badging, workforce, early alert—we need to know how students, not just courses, are doing.

Program Planning & Review
Continuous Improvement needs to become truly continuous to succeed.
Student Success Becomes Intentional:

I want to be a {Construction Manager}.

Skills Needed

Courses Composed into Programs

Course Outcomes Become Badge-based Pathways

Outcomes Aligned to Student Services w/DLAs

Student Services

Academic

Writing Center  Math Lab

Course Units & Assessments Design to Deliver Skills

Individual Student Success Dashboards & Portfolios

I'm now a {Construction Manager}.

<table>
<thead>
<tr>
<th>User/Activity</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>1</td>
</tr>
<tr>
<td>Unit 2</td>
<td>1</td>
</tr>
<tr>
<td>Unit 3</td>
<td>1</td>
</tr>
<tr>
<td>Assessment</td>
<td>1</td>
</tr>
<tr>
<td>Unit 4</td>
<td>1</td>
</tr>
<tr>
<td>Unit 5</td>
<td>1</td>
</tr>
<tr>
<td>Assessment</td>
<td>1</td>
</tr>
</tbody>
</table>
Curriculum is Disconnected

Curriculum & Catalog Vendors

Traditional curriculum and catalog solutions have evolved to have some learning outcomes development tools, but none support the development of multidimensional outcomes/competency models eLumen does.

More importantly, the are not able to integrate key course/learning outcome data with Assessment Management Systems or Learning Management Systems.
... and Assessment is Too Static

Assessment & Planning Vendors

Traditional assessment and planning vendors do not support (or support well) multi-dimensional learning outcomes/competency models and have weak LMS integration. More importantly, they don’t support things like APIs and versioning to ingest from Curriculum Systems, which are the system of record.

As a result, doing course-embedded assessment is very labor intensive and program review does not have a direct connection to course and program evolution.
This Serves Students AND Institutions

Ed Plan/Audit
Zero-Configuration Ed Plan & Audit with our Curriculum. Pathways become smarter & competency-aware with our Assessment.

Portfolio
Signature assessments can be embedded in pathways with portfolios; then portfolios used to get jobs.

Badging & Transcript
We enhance what becomes possible in representing achievement; in engaging in course/skills/badges over life of student success.
We Enhance & Extend the LMS

CBE Use Case One: CBE Configuration of LMS

Competency Service
- Curriculum
  - Course Outline
  - Objectives & Outcomes
  - Assessment Standards

LMS
- Learning Activity
- Assessment
- Course Outcomes
- Course Analytics

Rubric Service

AMS
- Outcomes Management
- Program Review
- Accreditation

CBE Result
Students will Succeed on Purpose

Co-Remediation

Problem
Screening for basic skills can work—but can sometimes screen out students who would better benefit from Co-Remediation.

Co-Remediation
Adopting Competency-Based assessments into curriculum allows you to do early formative assessments of core skills such as writing and math while also engaging students in the skills development they’ll need in their program.

Withcolumn’s ability to score individual students, map skills from course to program and Gen Ed outcomes, as well as track demographics, you can send one set of remedial students to the Writing Center and another to ESL Mentoring.

Smart Pathways

Problem
Specific skills can be a challenge over time, even if a student is progressing through their program.

Retention
Competency-Based offerings allow you to build alternative offerings that address specific skills gaps or skills emphases.

Retention suggests allowing you to define alternative assessment strategies, as well as track both individuals and cohorts over time. This combination of variable strategies initiative and individual student tracking can change what the game for assessment.

Work Ready

Problem
Students—and their future employers—want to know that they are leaving your institution “skills ready.” Are they?

Skills-Ready
Accreditor demands, Program Review, and other academic process supports are reasons enough to do some form of outcomes modeling and assessment.

But the real reason—the reason enrollment was formed as a company—that by paying attention to student skills, by designing courses and programs to deliver those skills, we do better by our students, enabling them to live the lives they have imagined.
Our Partner Ecosystem is Strong

LMS all Partners Today

- canvas
- D2L™
- Blackboard

Consortia

- eLumen Sponsor Lumina/C-BEN CBE Initiatives
- Higher Ed Technical Architects for IMS Global CASE Standard
- AACC/League of Innovation Primary Sponsor

Analytics (2017-18)

- Tableau
- Burning Glass/EMSI

Infrastructure

- Ellucian
- Oracle/Peoplesoft
- Unicon
- CCCTC/Glue
Let’s See How This Works.