# Student Learning Outcomes Handbook

## by SLO Committee

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Yuba College Marysville, CA 2013

# Table of Contents

### I. SLO Overview

Vision Statement	3
Yuba College Program SLO Policy Statement	4
Yuba College Course SLO Policy Statement	5
Types of SLOs	6
Verbs for Creating SLOs	7
Methods of Assessment	8
Responsibility Chart	10
SLO Reporting Form (for ADJUNCT only)	11
TracDat Instructions	12

### Vision Statement

Student Learning Outcomes or SLOs are the overarching academic and service goals by which Yuba College focuses on intentional learning. They represent the most important learning benchmarks for the course, semester, or academic year. They are observable, specific, and measurable. These SLOs are aligned from courses, programs, student services and institutional. Through SLOs, Yuba College distinguishes itself with its "learning signature" - what makes us unique and best able to meet the diverse educational needs of our community. With the careful implementation of SLOs, the college is able to focus on the design and improvement of students' educational experiences. As a result of the ongoing SLO cycle, (continuous quality improvement) students are best prepared to successfully enter future roles as transfer students, employees, and citizens of an ever changing world. "

Program-level Student Learning Outcomes (PSLOs) are what students achieve and are able to do upon finishing an academic program or completing a student services program activity. Outcomes must be observable and/or measurable.

#### **Developing PSLOs**

A department should develop Program SLOs that correspond to two or three of the eight institutional SLOs. Once Program SLOs (PSLOs) are defined, they are not static. They are subject to periodic revision in order to maintain currency and relevance. However, if they continue to be relevant through time, they do not need to be changed.

Department faculty must develop uniform SLOs for their program. Consensus must be reached between all full-time faculty within a department, at all campuses within the college. No distinction may be made, for instance, between a "Yuba PSLO" for a particular program and a "Clear Lake PSLO" for the same program. All PSLOs must be identical college-wide. In larger departments, which may include full-time faculty at more than one campus, the faculty may wish to create a sign-off sheet, verifying that every full-time faculty member from each campus has participated in determining the program SLOs.

In determining PSLOs and developing PSLO assessments, a college department should foster collaboration among its entire faculty, including those located at other campuses. All full-time faculty (and where feasible, adjuncts) within a college's department should be included and participate meaningfully in developing PSLOs and assessments. In developing PSLOs, faculty are encouraged to invite those who have a first-hand view of the roles for which students are preparing, such as colleagues from referring and receiving educational institutions, potential employers, and former students. These advisory groups can often offer valuable insight in developing a program's SLOs.

#### Assessing PSLOs

There are two main ways that a program's SLOs may be assessed. The first method is to develop a unique assessment tool (e.g., an "exit exam," "portfolio," etc.), to measure whether a program's individual graduates have achieved mastery of specified learning outcomes. The other PSLO assessment method is for programs to aggregate existing data from course-level SLOs (CSLOs) in order to gauge the extent to which a program's SLOs are being achieved collectively by students in the program. The first method is especially appropriate for programs (e.g., welding) that have a need to certify that individual program graduates have achieved mastery of specific skills and knowledge. The second method is especially appropriate for programs (e.g., math) that serve a broad population of students (and thus may not have a well-defined set of "graduates" or "majors"). Although the second method does not require developing a unique assessment method, it does require careful "mapping" of all the CSLOs in the courses offered in a program to the PSLOs for that program, and careful aggregation of data based on the links between CSLOs and PSLOs. Programs should achieve consensus on which type of PSLO assessment method to use, and on a plan for collecting and reporting the data. A program's SLOs must be assessed at least once during a four-year cycle, preferably during the Program Review cycle. Ideally, all SLOs attributed to a program are assessed simultaneously.

Course-level Student Learning Outcomes (CSLOs) are the evidence of the learning that takes place in a course. Outcomes must be observable and/or measureable.

#### **Developing CSLOs**

A department must develop course SLOs which correspond to its program SLOs. Each course within a program need not fulfill every program-level SLO; however, each course must meet at least one. Once course SLOs (CSLOs) are defined, they are not static. They are subject to periodic revision in order to maintain currency and relevance. However, if they continue to be relevant through time, they do not need to be changed.

Department faculty must develop uniform SLOs for each course. Consensus must be reached between all full-time faculty within a department, at all campuses within the college. No distinction may be made, for instance, between a "Yuba CSLO" and a "Clear Lake CSLO." All SLOs for a given course must be identical college-wide. In larger departments, which may include full-time faculty at more than one campus, the faculty may wish to create a sign-off sheet, verifying that every full-time faculty member from each campus has participated in determining the department's CSLOs.

In determining CSLOs and developing CSLO assessments, a college department should foster collaboration among its entire faculty, including those located at other campuses. All full-time faculty (and where feasible, adjuncts) within a college's department should be included and participate meaningfully in developing CSLOs and CSLO assessments.

#### Assessing CSLOs

It is advisable that departments reach consensus on a standard method of assessment for each CSLO. However, faculty within a department may elect to use differing methods of assessment for a particular course's SLO, if they can reach consensus that each of the methods is valid for the intended outcome. At least one CSLO must be assessed each time the course is offered.

If more than one SLO is attributed to a course, and a department elects not to assess all of them during a given semester, the department should agree on which course SLOs will be assessed. For example, if the English department lists three SLOs for its English 1A composition course, it need not assess all three of those SLOs during a given semester – as long as each of the three SLOs is assessed sometime within a four-year cycle. However, the department should agree which of the three SLOs will be assessed in a given semester. It may determine, for instance, to assess the first two SLOs for English 1A in the Fall semester and the third SLO for English 1A in the Spring semester. All faculty teaching English 1A in the Fall should assess the same first two SLOs, and all faculty teaching English 1A in the Spring should assess the same third SLO.

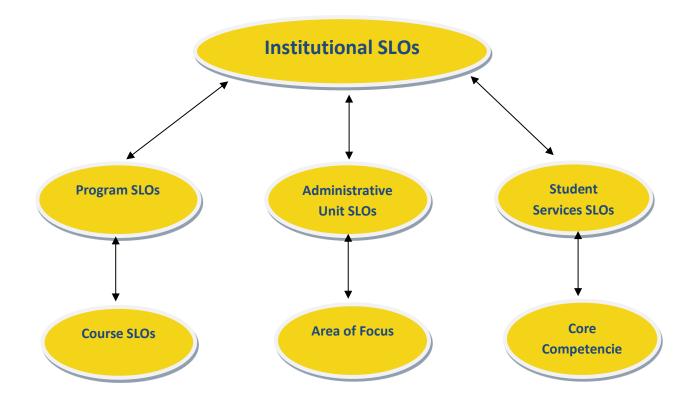
### Types of SLOs

**Institutional SLOs** - A broad set of outcomes that students will have achieved when they complete their educational goals at the Yuba Community College District.

Administrative Unit SLOs - Clear measurable statements used to define the administrative unit's goals by describing what the administrative unit does and its impact on key stakeholders.

**Program SLOs** - Faculty within a discipline agree on a set of SLOs that students will be able to do upon completion of a sequence or cluster of courses leading to a certificate, degree, or specific body of knowledge

**Course SLOs** - Themes, concepts, and issues as well as skills taught and learned through demonstration, practice and feedback. "Knowledge, skills, abilities, and attitudes that a student has attained at the end (or as a result) of his or her engagement in a particular set of collegiate experiences."—ACCJC



### Verbs for Creating SLOs

When creating your SLO, try and use action verbs that can result in overt behavior that can be observed and measured. Avoid verbs that are unclear and call for internal behavior that cannot be measured, such as "appreciate, aware of, familiar with, understand..." When creating your SLOs, ask two questions: "Can it be measured?" and "Is learning being demonstrated?" Below are verbs categorized by the eight Institutional SLOs that can be used when writing your SLOs.

		O#1 COMMUNICATIO	N	
Define	Label	Communicate	Argue	Relate
Describe	Express	Discuss	Identify	Comprehenc
Cite	Explain	Repeat	Report	Debate
	9	SLO#2 COMPUTATIO	N	
Solve	Interpret	Organize	Calculate	Estimate
Analyze	Quantify	Compute	Predict	Apply
Communicate	Describe	Utilize	Demonstrate	Implement
	SL	O#3 CRITICAL THINKI	NG	
Classify	Differentiate	Appraise	Solve	Formulate
, Compare	Simplify	Summarize	Analyze	Evaluate
Rate	Quantify	Qualify	Discriminate	Categorize
	· · · · ·			
		0#4 GLOBAL AWAREN		
Articulate	Diversify	Identify	Develop	Design
Discriminate	Illustrate	Implement	Criticize	Explain
Recognize	Interpret	Explore	Demonstrate	Support
	SLO#5 I	NFORMATION COMP	PETENCY	
Conduct	Present	Use	Communicate	Reproduce
Locate	Retrieve	Evaluate	Order	Classify
Explain	Produce	Gather	Relate	Discuss
Demonstrate	Participate	SONAL & SOCIAL RESI		Apply
Practice	Develop	Inform	Support	Apply Utilize
Assess	Work	Practice	Respect Complete	Collaborate
ASSESS	VVOIK	Flactice	Complete	Collaborate
	SLO#	7 TECHNICAL AWARE	INESS	
Locate	Interpret	Organize	Develop	Present
Investigate	Apply	Participate	Implement	Explain
Examine	Demonstrate	Utilize	Select	Construct
	SLO#	#8 SCIENTIFIC AWARE	NESS	
Explore	Examine	Interpret	Differentiate	Design
Implement	Observe	Research	Investigate	Survey
		1		

Methods will vary depending on the learning outcome(s) to be measured.

**Capstone Courses:** Could be a senior seminar or designated assessment course. Program learning outcomes can be integrated into assignments.

**Case Studies:** Involve a systematic inquiry into a specific phenomenon, e.g. individual, event, program, or process. Data are collected via multiple methods often utilizing both qualitative and quantitative approaches.

**Classroom Assessment:** Is often designed for individual faculty who wish to improve their teaching of a specific course. Data collected can be analyzed to assess student learning outcomes for a program.

**Collective Portfolios:** Faculty assemble samples of student work from various classes and use the "collective" to assess specific program learning outcomes. Portfolios can be assessed by using scoring rubrics; expectations should be clarified before portfolios are examined.

**Content Analysis:** Is a procedure that categorizes the content of written documents. The analysis begins with identifying the unit of observation, such as a word, phrase, or concept, and then creating meaningful categories to which each item can be assigned. For example, a student's statement that "I learned that I could be comfortable with someone from another culture" could be assigned to the category of "Positive Statements about Diversity." The number of incidents that this type of response occurred can then be quantified and compared with neutral or negative responses addressing the same category.

**Embedded Questions to Assignments:** Questions related to program learning outcomes are embedded within course exams. For example, all sections of "research methods" could include a question or set of questions relating to your program learning outcomes. Faculty score and grade the exams as usual and then copy exam questions that are linked to the program learning outcomes for analysis. The findings are reported in the aggregate.

**Exit Interviews:** Students leaving the university, generally graduating students are interviewed or surveyed to obtain feedback. Data obtained can address strengths and weaknesses of an institution or program and or to assess relevant concepts, theories or skills.

**Focus Groups:** Are a series of carefully planned discussions among homogeneous groups of 6-10 respondents who are asked a carefully constructed series of open-ended questions about their beliefs, attitudes, and experiences. The session is typically recorded and later the recording is transcribed for analysis. The data is studied for major issues and reoccurring themes along with representative comments.

**Interviews:** Are conversations or direct questioning with an individual or group of people. The interviews can be conducted in person or on the telephone. The length of an interview can vary from 20 minutes to over an hour. Interviewers should be trained to follow agreed-upon procedures (protocols).

**Locally Developed Essay Questions:** Faculty develop essay questions that align with program learning outcomes. Performance expectations should be made explicit prior to obtaining results.

**Locally Developed Exams with Objective Questions:** Faculty create an objective exam that is aligned with program learning outcomes. Performance expectations should be made explicit prior to obtaining results.

**Matrices:** Are used to summarize the relationship between program objectives and courses, course assignments, or course syllabus objectives to examine congruence and to ensure that all objectives have been sufficiently structured into the curriculum.

**Observations:** Can be of any social phenomenon, such as student presentations, students working in the library, or interactions at student help desks. Observations can be recorded as a narrative or in a highly structured format, such as a checklist, and they should be focused on specific program objectives.

**Primary Trait Analysis:** Is a process of scoring student assignments by defining the primary traits that will be assessed, and then applying a scoring rubric for each trait.

**Reflective Essays:** Generally are brief (five to ten minute) essays on topics related to identified learning outcomes, although they may be longer when assigned as homework. Students are asked to reflect on a selected issue. Content analysis is used to analyze results.

**Scoring Rubrics:** Can be used to holistically score any product or performance such as essays, portfolios, recitals, oral exams, research reports, etc. A detailed scoring rubric that delineates criteria used to discriminate among levels is developed and used for scoring. Generally two raters are used to review each product and a third rater is employed to resolve discrepancies.

**Standardized Achievement and Self-Report Tests:** Select standardized tests that are aligned to your specific program learning outcomes. Score, compile, and analyze data. Develop local norms to track achievement across time and use national norms to see how your students compare to those on other campuses.

**Surveys:** Are commonly used with open-ended and closed-ended questions. Closed ended questions require respondents to answer the question from a provided list of responses. Typically, the list is a progressive scale ranging from low to high, or strongly agree to strongly disagree.

**Transcript Analysis:** Are examined to see if students followed expected enrollment patterns or to examine specific research questions, such as to explore differences between transfer and freshmen enrolled students.

Source: Allen, Mary; Noel, Richard, C.; Rienzi, Beth, M.; and McMillin, Daniel, J. (2002). Outcomes Assessment Handbook. California State University, Institute for Teaching and Learning, Long Beach, CA.

Back to Table of Contents

### Responsibility Chart

	Academic Faculty	Student Service Areas	Administrative Areas	SLO Committee	President & Vice President	Researcher	Deans & Directors	Academic Senate	College Council	Curriculum Committee
Oversee College SLO process				х	х			х	Х	
Develop & Assess CSLOs	Х									
Develop & Assess PSLOs	Х	Х								
Develop & Assess ASLOs			х							
Develop & Assess ISLOs				Х	х	Х				
Analyze assessed results	Х	х	х		х	Х	х			
Use assessed results to improve student learning	х	х	x							
Ensure CSLOs are included in course outlines	х						х			х
Ensure CSLOs are included in course syllabi	х						х			
Ensure SLOs are in the catalog and on the college web site					х					
Incorporate SLOs into Program Review	Х	Х	х							
Make decisions that align college practices to support & improve student learning					х				х	
Manage assessment data						Х				

### SLO Reporting Form (for ADJUNCT only)

Course:	Course Location:	Term:	Submitted By:	Date Submitted:

Student Learning Outcome Assessed (Please type your <u>course</u> SLO as it appears on your syllabus):

Assessment (describe how you assessed your SLO and what your criteria for success are):

**Results** (enter your SLO assessment results and a brief conclusion from the assessment):

How many students were assessed?	
How many students passed the SLO?	

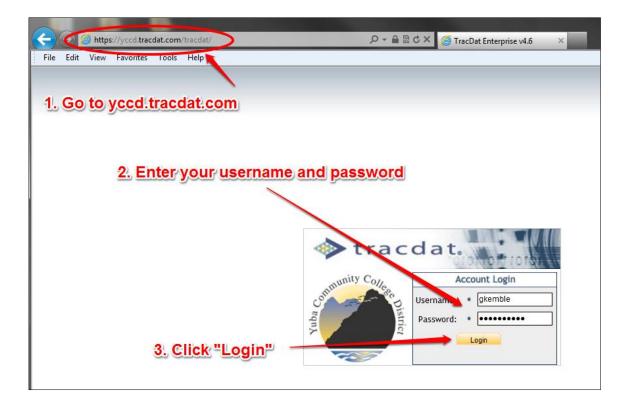
**Next Steps** (describe how the results will be used to make changes in the future):

Thank you for completing the SLO reporting form. Please send the completed form to your division contact or drop off a hard copy in her/his mailboxes.

### TracDat Instructions

### Logging in to Tracdat

- 1. Go to TracDat (<u>https://yccd.tracdat.com/</u>)
- 2. Enter your Username and password.
  - Your Username is the name in your yccd.edu email address
  - Your default password is the first four letters of your last name followed by the last 4 digits of your Social Security number. Note: The first letter should be capitalized. If you want to change your password, click on the Profile tab at the top of the page.
- 3. Click Login.



### **Entering the SLO**

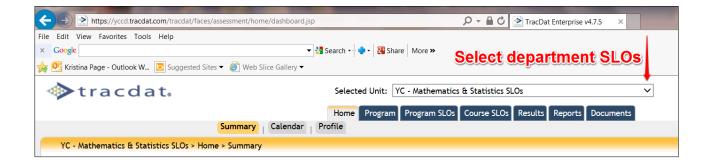
To add a new SLO in Tracdat, there are 2 steps:

- Creating the SLO
- Creating the assessment

If you are creating Program SLOs, follow the steps in **Creating the SLO** (below), but in Step 2, click on the **Program SLOs** tab instead of the **Course SLOs** tab.

#### **Creating the SLO**

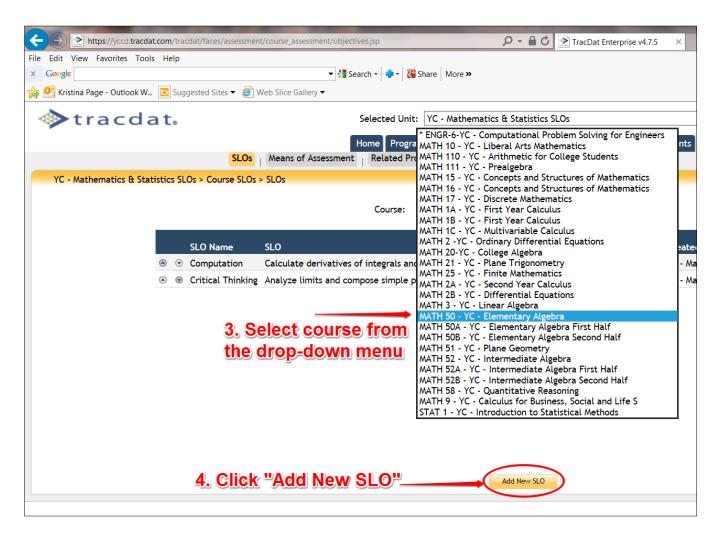
1. In the **Selected Unit** drop-down menu, select your department's SLOs.



2. Click on "Course SLOs"

+ https://yccd.tracdat.com/tracdat/faces/assessment/home/dashboa	ard.jsp 🔎 – 🔒 🖒 💽 TracDat Enterprise v4.7.5 🛛 ×
File Edit View Favorites Tools Help	
× Google	🔻 🚼 Search 📲 🍨 🗱 Share 🛛 More »
숽 💁 Kristina Page - Outlook W 📴 Suggested Sites 🔻 🍘 Web Slice Gallery	/ 🕶
◆tracdat₀	Selected Unit: YC - Mathematics & Statistics SLOs
	Home Program Program SLOs Course SLOs Results Reports Documents
Summary Calend	lar Profile
YC - Mathematics & Statistics SLOs > Home > Summary	Click "Course SLOs"

- 3. Select a **course** from the drop-down menu.
- 4. At the bottom of the screen, click the "Add New SLO" button



- 5. Complete the information on the SLO Creation page (fields with an asterisk\* are mandatory)
  - a. **SLO Name:** Choose a short descriptive name
  - b. **SLO:** Type your student learning outcome here, describing what your students should know or be able to do as a result of the course
  - c. **Assessment Cycles:** Select the years the course will be assessed if you want to use the TracDat scheduling function
  - d. **Course Outcome Status:** Select Active; for SLOs that are no longer being used, change status to Inactive, but do not delete them
  - e. Start Date: Enter the date you will begin assessing this SLOS
  - f. Inactive Date: Leave blank unless you are inactivating this SLO
- 6. Click "Save Changes"
- 7. Click "Return"

Select	ted Unit: YC - Mathematics & Statistics SLOs
Home	
SLOs   Means of Assessment   Rel	lated Program Program SLOs Related Goals
YC - Mathematics & Statistics SLOs > Course SLOs > SLOs > Edit SLO	
Course:	Elementary Algebra
5a. Descriptive name	* Polynomial ?
5b. Describe the SLO	* Students will be able to factor a polynomial
Assessment Cycles:	2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 <b>5c. Optional: use only if you plan</b> <b>to use the TracDat scheduling option</b>
5d. Select "Active" — Course Outcome Status:	Active 🗸
5e. Date to begin assessment	8/1/2010
Inactive Date:	🔤 🛶 5f. Leave blank
6. Click "Save Changes"	Save Changes     Discard Changes     Return     Save Changes

#### Creating the Assessment

- 1. From the Course SLO page, click on "Means of Assessment"
- 2. If your course does not already appear on the screen, select the appropriate **course** from the drop-down menu.

tracdat	t₀	Selected Unit: YC -	- Mathematics & Statistics SLOs
			Program SLOs Course SLOs Results Reports Documents
	SLOs Means of Assessment	Related Program	n Program SLOs Related Goals
YC - Mathematics & Statisti	cs SLOs > Course SLOs > Means of Assessment	- 1. 0	Click "Means of Assessement"
Course:	* ENGR-6-YC - Computational Problem Solvin	g for Engineers	
	MATH 10 - YC - Liberal Arts Mathematics		
	MATH 110 - YC - Arithmetic for College Stude	nts <sup>WI</sup>	vns this Course. Hold your cursor over the course to see the currer
SLO Name:	MATH 111 - YC - Prealgebra MATH 15 - YC - Concepts and Structures of M	thomatics	
	MATH 15 - YC - Concepts and Structures of M MATH 16 - YC - Concepts and Structures of M		
Created By:	MATH 17 - YC - Discrete Mathematics	achemacies	
	MATH 1A - YC - First Year Calculus	ta	andard programmin
	MATH 1B - YC - First Year Calculus		
SLO:	MATH 1C - YC - Multivariable Calculus		
	MATH 2 -YC - Ordinary Differential Equations MATH 20-YC - College Algebra		
	MATH 20-TC - College Algebra MATH 21 - YC - Plane Trigonometry		
Date Added Type	MATH 25 - YC - Finite Mathematics		Criterion for Success
	MATH 2A - YC - Second Year Calculus		
<ul> <li>8/28/2014 Lab</li> <li>Project</li> </ul>	MATH 2B - YC - Differential Equations	F	Success is deemed to be a class average of at least 75% with than 82% (10% higher than meeting expectations).
Froject	MATH 3 - YC - Linear Algebra		
	MATH 50 - YC - Elementary Algebra MATH 50A - YC - Elementary Algebra First Ha	4	2. Select course
	MATH 50A - TC - Elementary Algebra First Ha MATH 50B - YC - Elementary Algebra Second		
	MATH 51 - YC - Plane Geometry		
	MATH 52 - YC - Intermediate Algebra		
	MATH 52A - YC - Intermediate Algebra First H		
	MATH 52B - YC - Intermediate Algebra Secon	d Half	
	MATH 58 - YC - Quantitative Reasoning MATH 9 - YC - Calculus for Business, Social ar	ul life C	
	STAT 1 - YC - Introduction to Statistical Meth		dd New Assessment Method Return To SLO
	sint i re introduction to statistical meth		

- 3. Select the SLO for which you are creating an assessment for from the **SLO Name** drop-down menu
- 4. At the bottom of the screen, click "Add New Assessment Method"

tracdat	Selected Unit: YC - Mathematics & Statistics SLOs
	Home Program Program SLOs Course SLOs Results Reports Documents SLOs Means of Assessment Related Program Program SLOs Related Goals
YC - Mathematics & Statistic	is SLOs > Course SLOs > Means of Assessment
Course:	MATH 50 - YC - Elementary Algebra
SLO Name: Created By: SLO:	Equation of Line Polynomial Equation of a Line Factor Polynomial Linear Inequality Graph Linear Equation Application Problem using System of Equations Arithmetic Operations on Polynomial Expressions Properties of Integer Exponents System of Linear Equations
Date Added Type	Assessment Method
4. Select "Ad	d New Assessment Method" Add New Assessment Method Return To SLO

- 5. Complete the information on the Assessment Page (fields with an asterisk\* are mandatory)
  - a. **Type:** Select the correct method from the drop-down menu
  - b. Assessment Method: Give a short description of your means of assessment
  - c. **Criterion for Success:** Enter your specific criteria (Example: At least 70% of all students will pass with a score of "7 out of 10" or higher)
  - d. Schedule: Enter your assessment plan schedule, if any
- 6. Click "Save Changes"

◆tracdat₀	Selecte	d Unit: YC - Mathematics & Statistics SLOs	
SLOs Means of Assessment	Home Home Home Home Home Home Home Home		
YC - Mathematics & Statistics SLOs > Course SLOs > Means of Assessment > Edit Assessm	nent Method		
	Course:	Elementary Algebra	
	SLO Name:	Polynomial	
		Students will be able to factor a polynomial	~
	SLO:		$\sim$
5a. Select method _	Туре:	Test/Exam: Departmental	
5b. Describe the assessment —	* Assessment Method:	One question chosen by the department (not multiple choice) will be included as part of the final exam, and aggregate scoring of these questions will allow year-to-year comparison. Results will be reported as a point distribution for each problem.	$\langle \rangle$
5c. Enter specific criteria ——	Criterion for Success:	Success is scoring 65% or higher	< >
5d. Enter schedule (optional)	Schedule:		<
	Active:	V	
6. Click "Save Changes		e Changes Discard Changes Relate Document Assign	

- 7. To upload any related documents (e.g., blank rubrics)
  - a. click **Related Documents**
  - b. Select the document type from the pop-up list:
    - New Document (i.e., a document that has never been uploaded to Tracdat)
    - **Document From Repository** (i.e., a document that has already been uploaded to Tracdat)
    - **Previously Related Document** (i.e., a document that has been related to this assessment in the past).

73	a Click "Re	lated Docu	ments"	<u>7b</u> .	Select docume	ent type
	Save Changes	Discard Changes	Relate Document New	v Document		
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			<u>FIG</u>	viously kelated boculien	-	
Copyright	© 1998-2013 Nuventive. All	Rights Reserved	About Nuven	tive   Contact Us	Nuventive	

c. Click "Save Changes" after you have related your document.

#### Mapping Course SLOs to Institutional SLOs

- 1. In the **Selected Unit** drop-down menu, select your department's SLOs.
- 2. Click "Course SLOs"
- 3. Click "Related Goals"
- 4. Select **Course** from drop-down menu
- 5. Check the box(es) to mark the appropriate institutional learning outcomes (iSLOs)
- 6. Click "Save Changes"

tracdat. 1. Select department SLOs	) —		Selected Unit: YC - Math	ematics & Statistics SLOs
-		H	lome Program Program	SLOs Course SLOs Results Reports Documents
SLOs   Means of Assessment   Re	lated F	rogram	n Program SLOs Related	Goals
YC - Mathematics & Statistics SLOs > Course SLOs > Related Goals				
4. Select course ——		urse:	MATH 50 - YC - Elementa	ry Algebra 🗸
	SLO N		Polynomial	✓
	Create	d By:	YC - Mathematics & Statis Students will be able to fa	
		SLO:	Students will be use to it	
		520.		~
		Instit	utional Learning Outcom	es
		Goal	Туре	Goal
		Comr	nunication	Effectively use language and non-verbal communication consistent with and appropriate for the audience and purpose.
5. Check box(es)		Comp	outation	Use appropriate mathematical concepts and methods to understand, analyze, and communicate issues in quantitative terms.
		Critic	al Thinking	Analyze data/information in addressing and evaluating problems and issues in making decisions.
		Globa	al Awareness	Articulate similarities and differences among cultures, times, and environments, demonstrating an understanding of cultural pluralism and knowledge of global issues.
		Infor	mation Competency	Conduct, present, and use research necessary to achieve educational, professional, and personal objectives.
			onal and Social onsibility	Interact with others by demonstrating respect for opinions, feelings, and values.
		Scien	tific Awareness	Understand the purpose of scientific inquiry and the implications and applications of basic scientific principles.
		Tech	nological Awareness	Select and use appropriate technological tools for personal, academic, and career tasks.
		YCCD	Board of Trustees Vision	Statement
		Goal	Туре	Goal
6. Click "Save Changes" —	_		Save Changes	Discard Changes Return To SLO

### **Entering SLO Results**

- 1. In the **Selected Unit** drop down menu, select your department's **SLOs**.
- 2. Click on the **Results** tab
- 3. Select "By Course"
- 4. Select **Course** from drop-down menu
- 5. Click "Add Result"

tracdat. 1. Select department SLOs	elected Unit: YC - Mathematics & Statistics SLOs
Но	me Program Program SLOs Course SLOs Results Reports Documents
By Unit By Course	
YC - Mathematics & Statistics SLOs > Results > By Course	2. Click on "Results"
3. Select "By Course" Critical Thinking : Demonstrate an understanding of a variety of mathematical ideas and systems.	* ENGR-6-YC - Computational Problem Solving for Engineers MATH 10 - YC - Liberal Arts Mathematics MATH 110 - YC - Arithmetic for College Students MATH 111 - YC - Prealgebra
Created By: YC - Mathematics & Statistics SLOs <u>Show Results</u>	MATH 15 - YC - Concepts and Structures of Mathematics MATH 16 - YC - Concepts and Structures of Mathematics MATH 17 - YC - Discrete Mathematics MATH 1A - YC - First Year Calculus
4. Select course —	MATH 18 - YC - First Year Calculus MATH 1C - YC - Multivariable Calculus MATH 2 - YC - Ordinary Differential Equations MATH 20-YC - College Algebra MATH 21 - YC - Plane Trigonometry MATH 25 - YC - Finite Mathematics MATH 24 - YC - Second Year Calculus MATH 26 - YC - Differential Equations MATH 3 - YC - Linear Algebra MATH 50 - YC - Linear Algebra MATH 50 - YC - Elementary Algebra First Half MATH 508 - YC - Elementary Algebra Second Half MATH 508 - YC - Intermediate Algebra MATH 520 - YC - Intermediate Algebra MATH 520 - YC - Intermediate Algebra MATH 520 - YC - Intermediate Algebra First Half MATH 520 - YC - Intermediate Algebra Second Half MATH 520 - YC - Quantitative Reasoning MATH 95 - YC - Quantitative Reasoning MATH 9 - YC - Calculus for Business, Social and Life S STAT 1 - YC - Introduction to Statistical Methods
5. Glick "Add R	

6. Select the **SLO** that you are adding results for

#### 7. Select the Assessment Method

tracdat.		Selected Unit: 🗋	'C - Mathematics	& Statistics SLOs		v 🎍 _ u
	By Unit By Course	Home Program	Program SLOs	Course SLOs Results Repo	rts Documents	1
YC - Mathematics & Statistics SLOs > Results > By Co	ourse > Select SLO					
		Course: MA	TH 50 - YC - Elem	entary Algebra	~	6. Select the SLO
SLO Name	SLO					Status
Equation of Line	Derive the equation of a line.					Active selec
Polynomial	Students will be able to factor a polynomial					Active Selec
Equation of a Line	Derive the equation of a line.					Active selec
Factor Polynomial	Factor a polynomial expression.					Active selec
Linear Inequality	Solve linear inequalities in one variable.	Select Assessment				Active selec
Graph Linear Equation	Graph and analyze linear equations.		Select:	Assessment Method 🗸		Active selec
Application Problem using System of Equations	Translate an application problem into a linea	Туре	Assessmen	t Method		Active selec
Arithmetic Operations on Polynomial Expressions	Perform arithmetic operations on polynomial	Test/Exam:		on chosen by the	select	Active selec
Properties of Integer Exponents	Apply the properties of integer exponents.	Departmental			Active selec	
System of Linear Equations	Solve systems of linear equations.			uded as part of the final		Active selec
		exam, and aggregate scoring of these questions will allow year-to-year comparison. Results will be reported as a point distribution for each problem. Test/Exam: A multiple choice question at the		ralart	7. Select Assessment Method	
		Test/Exam: Departmental	A multiple end of the		select	

- 8. Complete the information on the Edit Result page (fields with an asterisk\* are mandatory)
  - a. **Result**: Based on your assessment, describe your results. Also note what term (Fall, Spring or Summer) the assessment is for.
  - b. Result Date: Defaults to today's date; change to date assessment was given
  - c. **Result Type**: Select the option from the drop-down menu that matches your criterion for success
  - d. Reporting Year: Select the correct Academic Year from the drop-down menu
  - e. Number of Students: Enter the number of students who completed the assessment
  - f. **Delivery Method**: Select the method of instructional delivery from the drop-down menu.
- 9. Click **Save Changes** (\*Ignore message that says "Column name 'CF35" appears more than once in the results column list. This is a Tracdat error that is being worked on. Your results will still be saved once you click Return.)
- 10. Click Return

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	Home Program Program SLOS Course SLOS Results Reports Documents		
	By Unit   By Course		
YC - Mathematics & Statistics SLOs > Results > Edit Res	ult		ŵ 🔂
SLO:	Polynomial : Students will be able to factor a polynomial		
Assessment Method:	Test/Exam: Departmental - One question chosen by the department (not multiple choice) will be included as part of the final exam, and aggregate scoring of these questions will allow year-to-year comparison. Res as a point distribution for each problem.	sults will be	e reported
Criterion for Success:	Success is scoring 65% or higher		
8b. Date of assessment Result:	<ul> <li>Spring 2013 - See Related Documents for exam question.</li> <li>#26 forceret - 189</li> <li>#26 Blank - 3</li> <li>8a. Enter results (note what term they are for example of the second sec</li></ul>	<u>or)</u>	
Result Date:	* 10/30/2014 Result Type: * Meets Expectations V - 8c. Select option		
8e. How many	* 2013-2014 V - 8d. Select Academic Year		
assessed - Number of Students:	268 ?		
Delivery Method:	Face-to-Face/Brick & Mortar v 2		
Action Plan Related Documents			
Action Date	Action Follow-Up		add Action
No Actions defined.			
	10. Click "Return"		
9. Click "Save Ch	anges"		

#### 11. To upload any related documents (e.g. scoring rubrics, SLO questions, etc)

- a. Click Relate Document
- b. Select the document type from the pop-up list

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tment (not multiple choice) will I	be included as part of the final exam	and aggregate scoring of these questions will allow year-to-year	comparison. Results will be reported
3 points- 40; 2 point			
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/ Expectations			
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- Add Document × Source: **Find file** Browse.. File 🗸 Name: Name Autofills Description: Describe document  $\sim$ R Select folder General Original SLOs relate document
- New Document (i.e., a document that has never been uploaded to Tracdat)

• **Document From Repository** (i.e., document that has already been uploaded to TracDat)

Select Document From Repository		×
Show Folders For: YC - Mathematics & Statistics SLOs 🗸	Original SLOs	
🗀 <u>General</u> 🔄 Original SLOs	Type Document Name	Description
	Matematics SLOs.pdf	relate relate
	Statistics SLOs.pdf	
	Academic Calendar ~ Option Analysis FA2013-SP2014.docx	test <u>relate</u>
Select docume	nt	T I
		Click Rela

• **Previously Related Document** (i.e., a document that has been related to this assessment in the past)

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	ath 1A Spring 2012	SLO questions	6/19/2012	<u>relate</u>	
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Ma	ath 1B Spring 2012	SLO questions	5/23/2012	<u>relate</u>	
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Ma	ath 1B Spring 2012	SLO questions	5/23/2012	<u>relate</u>	
	ath 1B Summer )10	SLO Reporting Form; SLO questions included	5/23/2012	relate	
	ath 1B Summer )10	SLO Reporting Form; SLO questions included	6/2/2011	relate	
	ath 21 Summer )10	SLO Reporting Form; SLO questions included	6/2/2011	<u>relate</u>	
	ath 21 Summer )12	SLO questions	7/26/2013	<u>relate</u>	~

c. Click "Save Changes" after you have related your document