KF-SCIS Handbook for Instructors of Assessment Courses

Background: Assessment

Every year, KF-SCIS participates in assessment by a set of private agencies approved by the Department of Education as well as required assessment by the State of Florida and Board of Governers. The purpose is to maintain our accreditation status, the implications of which are multi-fold. Accreditation implies students have some re-assurance of education quality and integrity; students often will view accreditation status before applying to a school, and regional accreditation is required for receipt of federal financial aid money. It also lends credibility to our institution when our students receive a degree and allows the degrees awarded to be recognized by other institutions. Future employers of our students, and/or graduate programs will often view accreditation status of institutions on student transcripts.

Two external organizations are involved with accreditation of KF-SCIS. One is the **Southern Association of Colleges and Schools (SACS)**, which is the body for accreditation of degreegranting higher education institutions in the Southern States. KF-SCIS submits data for SACS every year. SACS is reaffirmed every ten years with a mid-term review at the five-year mark to ensure that institutions are making progress on assessment and continuing to improve.

The second is the *Accreditation Board for Engineering and Technology (ABET)*, a recognized US accreditor of college and university programs in applied and natural science, computing, engineering, and engineering technology. ABET is a current accreditor of KF-SCIS Bachelor of Science (BS) degree programs. ABET accreditation must be renewed every six years maximum.

An internal accreditation process is also performed for **Global Learning (GL).** All FIU undergraduates must take at least two global learning courses prior to graduation. One of these must be a global-learning foundations course in the University Course Curriculum (UCC). The second is a discipline-specific global learning course, which must be part of the student's major. At the time of this document, CGS3095 (Technology in the Global Arena) is the main discipline-specific GL course. CTS1500 can also be used for BS in Cybersecurity (BS-CY) students.

FIU has elected to streamline SACS and ABET accreditation, and the GL requirement – to ensure that by collecting annual data for SACS, we will have usable data for ABET and GL.



The timeline of SACS assessment proceeds as follows:

In summary, an Improvement Plan (Use of Results) must be developed every two years, which will be implemented in the following academic year. At the end of each two-year period (i.e. the beginning of the next two year period), KF-SCIS must submit a follow up to the "Use of Results" which indicates the impact of the improvement plan. This, in turn, forms the basis for the next plan.

By example -- in the figure – an Improvement Plan (Use of Resutls) will be built included in the 2022-2023 report, based on data from 2021-2022 and 2022-2023, This plan will be implemented in the 2023-2024 academic year. The data collected for 2023-2024 will be used to follow up in the 2022-2203 Use of Results and as the foundation for the next two year cycle – 2023-2024 and 2024-2025. In the 2024-2025 report, a new Improvement Plan will be constructed based on data from 2023-2024 and 2024-2025 and will be in effect. In the 2025-2026 academic year, the data collected will be used to follow up on the Use of Results (plan) from 2024-2025 which was implemented in 2025-2026.

KF-SCIS successfully achieved ABET accreditation of its BS degrees in 2023, meaning in 2029 (violet), it must re-apply.

What is Being Assessed?

KF-SCIS must define two sets of outcomes, which each answer its own respective set of questions:

Program Educational Objectives (Program Outcomes or POs)

Program educational objectives are broad statements that describe what graduates are expected to attain within a few years after graduation. Program educational objectives are based on the needs of the program's constituencies.

Student [Learning] Outcomes (SLOs)

Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program.

The purpose of assessment is to determine the degree to which students have attained POs and SLOs.

Program Outcomes (POs)

POs have been defined for every KF-SCIS degree program. A table containing the list of KF-SCIS degree programs and associated POs is available here: http://www.cs.fiu.edu/~tcickovs/KFSCIS/POs.html.

POs are assessed at the program level. By definition, PO assessment must only include KF-SCIS recent graduates, alumni and employers. At the time of this document, KF-SCIS POs are assessed through the administration of exit, alumni and employer surveys.

Student Learning Outcomes (SLOs)

Unlike POs, SLOs are assessed at the course level. For every KF-SCIS degree program, KF-SCIS has defined a specific set of SLOs, along with a specific set of courses used for SLO assessment. A table containing the list of KF-SCIS degree programs and associated SLOs is available here: http://www.cs.fiu.edu/~tcickovs/KFSCIS/SLOs.html

Courses used to assess SLOs must be required courses, to ensure they are taken by every student who completes the associated degree program. All sections of these courses must be assessed, using a uniform assessment method such as standard rubric(s) or embedded test questions. This implies that all sections of these courses must include material(s) (i.e. exams, assignments, etc.) to which this uniform assessment method can be applied. Note these materials can vary across course sections.

Courses used to assess SLOs are subject to the SACS/ABET/GL accreditation timeline, meaning that every two years (the first year of a new two-year period), results from the previous academic year will require analysis, and a new Improvement Plan will need to be developed.

Implications for Faculty Teaching Assessment Courses

It is the position of KF-SCIS that the set of faculty teaching an assessment course represents the optimal group of individuals to (1) determine the assessment method to be applied across sections and (2) analyze results and build new Improvement Plans for their courses (Use of Results) (3) Analize the data after the implementation of the Improvement Plan to determine the impact of the lan(Follow Up).

Each year, the group of faculty teaching an assessment course *X* will have four primary responsibilities.

- 1. Meet and agree upon the assessment method that will be applied to all sections of course *X* (including their own).
- 2. Build material(s) for their course section to which this uniform assessment method can be applied.
- 3. Complete the assessment method through Canvas for their course section using the Outcomes tool within Canvas.
- 4. Either create an Improvement Plan for the Use of Results, or review the data collected after implementation to complete the Folliw Up, depending on the year.

Building an Assessment Rubric

An assessment rubric should always involve <u>direct assessment</u> of student outcomes. To illustrate by example, we show below the rubric used for CGS3095 at the time of this document.

Outcome Full Marks (2) Partial Marks (1) No Marks (0)

GL1. Describe the	Includes a clear	Includes a discussion	Has no clear
legal, ethical, and	discussion of the	of the legal, ethical,	discussion of the
social impacts of	legal, ethical, and	and social impacts of	legal, ethical, and
technology as	social impacts of	technology as related	social impacts of
related to individual	technology as related	to individual privacy,	technology as related
privacy, security, and	to individual privacy,	security, and	to individual privacy,
anonymity in	security, and	anonymity in societies	security, and
societies across the	anonymity in societies	across the globe and	anonymity in societies
globe and in the	across the globe and	in the global Internet	across the globe and
global Internet	in the global Internet	society.	in the global Internet
society.	society.	,	society.
GL2. Describe the	Includes a clear	Includes a discussion	Has no clear
legal, ethical, and	discussion of the	of the legal, ethical,	discussion of the
social impacts of	legal, ethical, and	and social impacts of	legal, ethical, and
technology as	social impacts of	technology as related	social impacts of
related to	technology as related	to intellectual	technology as related
intellectual property	to intellectual	property rights, and	to intellectual
rights, and how the	property rights, and	how the global reach	property rights, and
global reach of the	how the global reach	of the Internet affects	how the global reach
Internet affects	of the Internet affects	these issues, but it is	of the Internet affects
these issues.	these issues.	weak or unclear.	these issues.
GL3. Identify a	Includes a clear	Includes a discussion	Has no clear
computing	discussion of the	of the computing	discussion of the
professional's roles	computing	professional's roles	computing
and responsibilities	professional's roles	and responsibilities	professional's roles
as related to	and responsibilities	as related to	and responsibilities
intellectual property.	as related to	intellectual property.	as related to
privacy, anonymity,	intellectual property.	privacy, anonymity,	intellectual property.
legal. social. and	privacy, anonymity,	legal, social, and	privacy, anonymity,
ethical issues.	legal, social, and	ethical issues but it is	legal, social, and
	ethical issues.	weak or unclear.	ethical issues.
SLO4. Recognize			
professional			
responsibilities and			
make informed			
judgements in			
computing practice			
based on legal and			
ethical principles.			
SLO3. Communicate	Includes a clear,	Includes an oral	Has no clear
effectively in a	appropriate, relevant	analysis of the global	appropriate, relevant
variety of	and compelling oral	technology impact	and compelling oral
professional	analysis of the global	but the analysis is	analysis of the global
contexts. (Oral)	technology impact	weak, inappropriate,	technology impact.
. ,	displaying the	not relevant or	<u> </u>
Method of	speaker's	unclear in expressing	
assessment:	understanding of the	the speaker's	
	issues.	-	

Students will present		understanding of the	
on an analysis of		issues.	
global technology			
impact issues			
SLO3. Communicate	Includes a clear,	Includes a written	Has no clear
effectively in a	appropriate, relevant	analysis of the global	appropriate, relevant
variety of	and compelling	technology impact	and compelling
professional	written analysis of the	but the analysis is	written analysis of the
contexts. (Written)	global technology	weak, inappropriate,	global technology
	impact displaying the	not relevant or	impact.
Method of	writer's understanding	unclear in expressing	
assessment:	of the issues.	the writer's	
Students will write a		understanding of the	
paper that		issues.	
involves an analysis			
of global technology			
impact issues.			

CGS3095 is currently used to collect assessment data for three GL course outcomes (numbered GL1-3), and two degree SLOs (SLO3 and SLO4). As a large degree of overlap was observed between GL3 and SLO4, faculty teaching CGS3095 elected to use the same metrics to assess both outcomes. SLO3 (communication) has been broken into oral and written components, with different metrics to assess each.

The specific rubric employed by all of the faculty in a specific course will vary widely from other courses based on the course. Courses that have been used to collect assessment data in prior semesters will likely have rubrics already in place, that require periodic updates. For assistance in starting a new rubric, KF-SCIS has assembled undergraduate and graduate assessment committees to provide additional guidance in ensure quality and adequacy in assessment.

Selecting Assessment Materials and Canvas Integration

Outcomes

"Outcomes" is now included, by default, within the Canvas course navigation system of all FIU courses. You can access this for your course by clicking "Outcomes" on the left side of your Canvas page.



Outcomes are organized by groups. Each outcome can be expanded to show the <u>unifromuniform</u> rubric used for assessment:

Outcomes		문 Instit + Create Q Find
Manage Alignments		
Outcome Groups	CGS3095 Outcomes	i.
~ costors	Search within COSI095	Q.
+ Craster New Comp + Craster New Comp	All CGS309/S Outcomes	5 Outcomes
	Collection Reach Students will reach discuss the legal, strild, and docal impacts of increasing as which the includual phases, security, and ensymbly in excitors across the good	and in the global Internet society,
	Proficiency Rating	Points
	Full Marks includes a clear discussion of the legal, ethical, and social impacts of transmitgery an indicate to indicate process, escaring, and anomenity in socialities across, they below of in the legal data interest society.	2
	Partial Marka: includes a discussion of the legal, ethical, and social impacts of lactimology as realised to individual privace, security, and anonymity in societies admiss the globe and is to give a social administration of the social anonymity of the social	1
	No Marke Hen no clear discussion of line type, ethnical and social impacts of technology as mainted to individual profession, security, and anonymity in saccientes across the global and in the global internet socializes	0
	Mastery at: 1 points	
	Proficiency Calculation: Average	
	 Indictual Property Structure and the observation and discuss the local address' and use of homes call the branches an extent to branches and home the observation of the 	Internet officers, these locates
		2
	Strutents will present on an analysis of global technology impact issues	1
	Professional Responsibilities Stratents will be able to examine and discurs a computing professional's roles and responsibilities as related to intellectual process, privace anonymits, legal, racial, and	ethical issues.
	 Wetten Communication Structure and another some that here has an unstack of all-but the tension inner that as 	1
	conserve and an advertised of the server of the server of the server of the server of the server.	

Please note that if you do not see the department level rubrics for the course, you will need to contact the assessment coordinator and your assigned instructional designer to have them attached to your course. You must use the departmental level rubrics as they feed into the data dashboard for assessment data. If you create rubrics, even duplicate rubrics of the departmental level rubrics, data will not get collected for your section.

Assignment Selection and Mapping to Outcomes

As mentioned, faculty must choose which assignment(s) in their sections will be used to assess each outcome. Once they have made that decision, there are several ways to associate an assignment with an outcome on Canvas. One of the most common methods will be through a rubric.

1241 - Spring 2024		Add Rubric
Home	3095 Presentation Rubric 12 criteria	
Syllabus	250 points possible	
Modules	s criteria	
Announcements	Case Study Rubric Sample (1)	
Discussions	5 criteria 100 points possible	
Assignments	Case Study Rubric Sample (1) (1)	
My Mediasite	5 criteria 100 points possible	
Grades	Case Study Rubric Sample (1) (1) (1)	
Ally Course	o criteria 100 points possible	
Accessibility Report	Case Study Rubric Sample (1) (1) (1) (1) 5 criteria	
My Credentials	100 points possible	
Quiz Extensions	<u>Case Study Rubric Sample (1) (1) (1) (1) (1)</u>	
Impact Course	Case Study Rubric Sample (1) (1) (2)	
Reports LTI 1.3	5 criteria 100 points possible	
Rubrics Ø	Cara Dividu Bularia Caranta (4) (4) (2)	

Rubrics can be created by clicking "Rubrics" on the left side of your Canvas site, then "Add Rubric".

At the bottom of the page, there will be a panel that offers the option of adding a new criterion for the rubric, or "Find Outcome":

+ Criterior	n Q Find Outcome		Total Points: 20
Cancel	Update Rubric		

Selecting the latter will open a page that will allow you to select one of the outcomes for the course:

CGS3095	Global Reach	🞯 Global Reach		
	Intellectual Property Oral Comm Global F Professional Respon Written Communication	ts will examine and di Reach to individual privacy, global Internet society. Full Marks: Includes a clear discussion of the	scuss the legal, ethical, and security, and anonymity in so Partial Marks: Includes a discussion of the	social impacts of technology a cieties across the globe and in No Marks: Has no clear discussion of the legal,
		legal, ethical, and social impacts of technology as related to individual privacy, security, and anonymity in societies across the globe and in the global Internet society. 2 Points	legal, ethical, and social impacts of technology as related to individual privacy, security, and anonymity in societies across the globe and in the global Internet society. 1 Points	ethical, and social impacts of technology as related to individual privacy, security, and anonymity in societies across the globe and in the global Internet society. 0 Points
		Use this criterion for scorir Calculation Method: Average	19	

Selecting "Import" will automatically insert this outcome along with its scoring system, into the rubric for this assignment:

Global Reach Students will examine and discuss the legal, ethical, and social impacts of technology as related to individual privacy, security, and anonymity in societies across the globa and in the global Internet society. threshold: 1.0 pts	2 pts Full Marks: Includes a clear discussion of the legal, ethical, and social impacts of technology as related to individual privacy, security, and anonymity in societies across the globe and in the global Internet society.	1 pts Partial Marks: Includes a discussion of the legal, ethical, and social impacts of technology as related to individual privacy, security, and anonymity in societies across the globa and in the global Internet society.	0 pts No Marks: Has no clear discussion of the legal, ethical, and social impacts of technology as related to individual privacy, security, and anonymity in societies across the globe and in the global internet society.	2 pts
+ Criterion Q Find	d Outcome			Total Points: 20
Cancel Updat	te Rubric			

Note that because the option was also given to add additional criterion, a rubric for this assignment can consist of a mixture of metrics chosen by the faculty to assess this assignment, and metrics that map directly to SLOs.

Once a faculty has associated an assignment with an outcome, this association will automatically appear in the "Alignments" tab of the "Outcomes" navigation:

Outcomes	12 import	
Manage Algements		
5 OUTCOMES 100% Coverage 2.0 Avg. Alignments per Cutcome	22 ASSESSABLE ARTIFACTS'/0 23% With Alignevits 0.2 Aug Alignment; pir Arthur:	
All Outcomes (5)		۵
 Global Reach 		Algoments:2
Students will examine and discuss the legal, ethical, and s	al imports of technology as related to individual privacy, security, and anonymity in sactisties across the globe and in the global Internet society.	
g2 Decusion 5 - Privacy & Social Media Module: <u>Week 13) TwitterSocial Media</u>		
[9] Toxic Discussion Rubric Soring 2023 - Outcomes Glob Module: New	Reach CW 111	
Intellectual Property		Algements:2
Students will be able to examine and discuss the legal, eth	al, and social impacts of technology as related to intellectual property rights, and how the global reach of the internet affects these issues.	
> Oral Communication		Algurenta 2
Students will present on an analysis of global tochnology	part inset	
> Professional Responsibilities		Alignments: 2
Students will be able to examine and discuss a computing	entessional's roles and responsibilities as related to intellectual property, privacy, anonynity, legal social, and othical issues.	
> Written Communication		Algrments 2
Students will write a paper that involves an analysis of gl	al technology impact losans.	

Use of Results and Follow Up

The use of results and follow up will involve a table structured similarly to this:

Outcome	# of	# of students that	Analysis*	Use of Results for Improvement
Name	students	met minimum		for Student Learning*
	assessed	criteria for success		

For Use of Results, Columns 1-3 will be populated with assessment data from the current year based on faculty submissions of rubrics through Canvas. The two remaining columns (marked '*') will need to be completed by faculty teaching the course.

Analysis: What do the results within columns 1-3 demonstrate?

<u>Use of Results for Improvement for Student Learning</u>: Based on the results and this analysis, what measures can we take to improve attainment of this outcome?

The Follow Up will be entered into the prior year report, in a subsection of "Use of Results". Columns 4 and 5 are not required.

An entry like this must be completed for every outcome of every degree program. Data will be provided to faculty broken down by degree program.