Evaluation of General Education Assessment at IPFW (2015-16)
Executive Summary
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Overview of Process:

The present assessment strategy for general education was implemented in 2013-14 as a result of the revision of general education to meet the Indiana Statewide General Education Core (Senate Enrolled Act 182-2012). It establishes a statewide general education core of 30 credit hours. Students who complete an approved general education program in any state institution are granted articulation of a 30 credit hour block to any other state institution. IPFW's first implementation and assessment was in Academic Year 2013-14 and the second implementation occurred in Academic Year 2014-15. Assessment Reports for each course are collected in the Fall Semester following the prior Academic Year. The 2015-16 Report summarizes assessment findings for 2014-15.

The assessment procedure in the first two years of the revised general education program was conducted at the course level. The instructions for the general education course assessment report in the letter from the General Education Sub-Committee stated:

> The GES wants to know if learning outcomes were met. The assessment should include a short analysis. It is possible to do this in a paragraph or two depending on how the course went. Be sure to include any rubrics that were used in the assessment. The GES expects that these reports will be fairly short.

The General Education Vibe Site provides four examples of assessment plans and two examples of Assessment Report formats. Both examples of Assessment Report Format were from English. The report format for ENG – W131 provided a good template for course level assessment. The requirements included:

1. State the specific outcome to be assessed.
2. Statement describing the assessment method
3. Identify the measurement standard.
4. State the methodology to ensure reliability and validity.
5. Provide the assessment results
6. Discuss the results, and
7. Identify improvements made as a result of the analysis of results.

2015-16 Reporting on General Education Assessment for Academic Year 2014-15

For the 2014-15 Academic Year, End of Year Assessment Reports were submitted to the General Education Sub-Committee on January 3, 2016. The full timeline for General Education Program Administration is presented in Appendix A. Reports were provided for two hundred six of the two hundred fifteen courses delivered. Departments submitted one report for Multi-Section courses. Members

of the General Education Assessment Subcommittee divided the course level assessment reports in equal numbers for review and completed the assessment report described in the outline below:

1. Did the report match the assessment plan on file in GEDIS?
2. Was a rubric used in the assessment?
3. If a rubric was used, was it included in the report?
4. Was data used in the assessment?
5. Where the goals stated in the plan (or in the assessment report if the report did not match the plan) met?
6. How was the data collected as part of the assessment used?
7. If goals were not met, was there an explanation for why they were not met?
8. Were there changes to the assessment plan or syllabus?
9. Was this a multi-section course?

The findings were summarized in an EXCEL spreadsheet. A sample of the EXCEL spreadsheet completed in 2015-16 is provided (Appendix B). The Chair of the Sub-Committee summarized the course reviews and prepared individual reports for each course/section general education faculty member summarizing the evaluation of their assessment and providing recommendations for improving assessment to the faculty member responsible for teaching the course or section. Where assessment was deficient, faculty members were referred to the Director of Assessment.

Evaluation of Assessment Process

While some courses (especially multi-section courses in the Writing Category, Speaking and Listening Category (within the Communications Courses), and some of the Quantitative Reasoning Courses) demonstrated quality assessment practices, the majority of courses assessed fell short. The process used, generally failed to produce results that could be considered a programmatic assessment of general education. Specifically:

1. The inconsistency of assessment methods across courses make it difficult to evaluate aggregate student performance relative to the stated Student Learning Outcomes for the specific General Education Categories.
2. The metrics for student performance are inconsistent across courses suggesting that a common level of student learning across courses and sections relative to the outcomes is not determined nor assessed.
3. The requirement that faculty only assess one (self-selected) outcome per year provides little assurance that all outcomes of the general education program are assessed. This is especially problematic in that Category A and Category B courses state between six and eight outcomes suggesting a single assessment cycle for a course could extend eight or more years.
4. The feedback cycle is too long. The process delays evaluation to the Spring Semester of the Academic Year following the assessment activity. Feedback is not provided until the end of the Spring Semester in the Academic Year following the assessment.
5. The process did not yield consistent evidence of using results of assessment findings to improve student learning.

Evaluation of Assessment Quality

The first two assessments of IPFW's revised general education program were limited in scope and quality. Three primary challenges in the assessment strategy are:

1. The majority of course level assessments of student learning (with the exception of the "Foundational Skills" category) assessed only one student learning outcome. There is no mechanism to ensure that the required outcomes for a specific category are assessed in a reasonable time frame.
2. The metrics for evaluating the level of learning relative to the student learning outcomes are undefined and inconsistent providing little to no support for determining the extent to which the general education program contributes to predetermined and commonly defined levels of student achievement relative to the stated student learning outcomes.
3. The majority of course level assessments failed to identify specific strategies to use assessment results to improve student achievement of the stated student learning outcomes in future course deliveries.

These challenges suggest that while IPFW is assessing individual student learning in general education courses, IPFW is not conducting a programmatic assessment of general education.

These assessment challenges are compounded by design issues inherent in the modified distributional structure of the general education program. While this structure offers a potential for creating coherence and meaning evidenced by specific general education categories, SLO's linked to the categories, an interdisciplinary category to help students connect two or more disciplinary areas, and a required capstone experience; the execution and communication of the program affords students limited opportunities to construct a meaningful intellectual experience that integrates with their eventual study in a major area. The heavy emphasis on autonomous course level assessment reinforces a perspective of general education as a collective of courses representing discreet "bits" of knowledge rather than a program representing a common integrated base of knowledge all graduates of IPFW should possess. This perspective of general education as a collection of courses rather than a program is enhanced by the sheer volume of courses in relationship to the relatively small credit hour requirement for general education completion.

Recommendations for General Education Assessment and Conclusion

The evaluation of the general education assessment process suggests that attention needs to be given to developing an integrated approach to general education assessment that:

1. Ensures all general education outcomes are assessed – preferably within a three year cycle.
2. Defines consistent criteria for performance relative to student learning outcomes for all general education categories.

3. Supports assessment strategies that are either common for all (or a valid sample of) students matriculating through the general education program that support continuous improvement of student learning.
4. Develops a set of practices that help students understand the purposes of general education at IPFW, select and matriculate through courses in meaningful patterns, communicates to students the levels of learning expected relative to the stated student learning outcomes, and helps students connect knowledge across general education categories and integrate general learning in the context of their major area of study.

To address these concerns, it is recommended that:

1. Courses approved in general education are approved for only one general education category and are expected to assess all SLO's for the category in a three year period.
2. Rubrics are developed for all General Education SLO's defining the level of learning expected of students. Appendix C provides an example developed based on AAC&U's Value Rubrics for Written Communication, Speaking and Listening, and Quantitative Reasoning categories.
3. A programmatic assessment strategy and a course level assessment process are implemented. For example, a signature assignment (or signature assignments) required for all courses within a category might be used to assess student learning relative to the stated outcomes to be assessed.
4. Modify the General Education Subcommittee Assessment Plan and process to comply with the requirements for programmatic assessment of general education stated in SD 15-6.
5. A General Education website developed aimed at the student audience to support understanding of the general education program, advisors are trained to explain the general education program and to help students select meaningful sequences of courses, and the design of the interdisciplinary and capstone categories are considered to help students connect knowledge between general education courses and integrate general education with their major area of study.
6. Modify the timeline for general education assessment to comply with SD 15-6. This would require the General Education Subcommittee to provide a report on the prior Academic Year assessment of general education to the Assessment Council at the end of January in the following academic year. Course level assessments would need to be due to the General Education Subcommittee by the end of October in the academic year following. Feedback to academic units should be provided to departments and courses by January of the following academic year. The Assessment Council provides a report to the General Education Subcommittee and the Vice Chancellor for Academic Affairs and Enrollment Management by April 1st in the following Academic Year.

Procedural changes to assessment are designated to the Chief Academic Officer in consultation with the General Education Subcommittee (SD 12-14, p. 12, Item 3). In conclusion, it is recommended that the changes begin in Fall 2016 and are facilitated as part of IPFW's participation in the HLC Assessment Academy. The action plan for the HLC Academy included

the development of an IPFW Assessment Academy. It is proposed that the design and implementation of a new assessment strategy is developed as a specific project of the IPFW Assessment Academy. To facilitate campus wide engagement in the process, it is recommended that each college select a representative to a general education assessment working group within the IPFW Assessment Academy.

Appendix A: General Education Program Timeline for 2015-16

4th week of semester - September 14, 2015 - Fall 2015-16 most up-to-date course syllabus due

End-of-year updates - December 31, 2015 - GES requested updates to syllabi and assessment plans due

End-of year assessment reports - January 8, 2016 - 2014-2015 Assessment Reports due

4th week of year - January 29, 2016 - 2016/17 New course application, syllabus, and full assessment plan due and outcome revisions for approved courses effective AY 2016/17 due

4th week of semester - February 1, 2015 - Spring 2015-16 most up-to-date course syllabus due

30-day remonstrance process begins - February 5, 2016 - Remonstrance comments for new 2016/17 courses begins. A list of courses subject to remonstrance will be sent.

30-day comment - March 14, 2016 - Remonstrance comments due

30-day response - April 5, 2016 - Responses to remonstrance comments due

Third Friday in April - GEP Bulletin changes due

End-of-year assessment reports - December 31, 2016 - 2015-2016 Assessment Reports due

End-of-year updates - December 31, 2016 - GES requested updates to syllabi and assessment plans due

Appendix B: Sample of EXCEL Report Summarizing Evaluation of Course Level Assessment

School	Department	Course-Section	Chair	Title	Member	Report match plan?	If no match, explanation?	Rubric?	Was data used?	Goals met?	If goals not met, explanation?	How is data used?	Changes to Plan?	Changes to syllabus?	Summarize mult-section?	Other comments
Arts and Sciences	Biology	BIOL-10000-01	Frank Paladino	Intro To Biol World	Linda										yes	
Arts and Sciences	Biology	BIOL-12600-01I	Frank Paladino	Human Biology	Linda	No	unclear	no	yes	no		Improvement included adding points to student graded. Needs more attention, for example, than points.	no	no		Outcomes not numbered according to categories; assessment activities given for extra credit; some discussion. Recommend revision of entire assessment plan and review of all assessment learning activities to be used to evaluate outcomes. Consultation with Assessment Director recommended by reviewer.
Arts and Sciences	Biology	BIOL-49100-01	Frank Paladino	Senior Biology Seminar	Linda	yes		no	yes	yes		Data used to support achievement.	no	no		Two faculty read each paper!! *** Exceeds benchmark; good chart and discussion.
Engineering Tech and Comp Sci	Manufacturing & Construction Engineering Tech	ARET-12300-01	Gary Steffen	Digital Graphics Built En	Linda	unclear		no	yes	unclear	Data used but scale and criteria used are unclear; uses quizzes but number of questions devoted to each outcome is not clear. Most goals met but some need attention. Does discuss results and indicates more emphasis is needed for 3 outcomes.	Cannot tell how the project results related to the outcomes.	no	no		ABET comments are not explained.
Engineering Tech and Comp Sci	Manufacturing & Construction Engineering Tech	ARET-21000-01	Gary Steffen	Architecture & Urb Form	Linda	unclear		no	yes	unclear There is discussion of lower results in online section but that instructor has retired. Other non-retiring instructor's section met goals.		Data is used but scale is unclear. Data is confusing.	no	no		ABET comments are not explained. Appears that no changes are required.
Engineering Tech and Comp Sci	Manufacturing & Construction Engineering Tech	ARET-22300-01	Gary Steffen	Digital Graphic Built Env	Linda	unclear		no	yes	unclear		Instructor evaluates notebook and two projects. All data reported as one combined score. No discussion and reader has no clue.	no	no		Another ABET-oriented; however, improvement is noted because the instructor retired and someone new will be teaching this class.
Engineering Tech and Comp Sci	Manufacturing & Construction Engineering Tech	IET-10500-01	Gary Steffen	Industrial Management	Linda	yes		no	yes	yes		Specific recommendations (action plan) of suggested changes is clear and understandable. However, I am not sure what is considered expectable.	no	no		I appreciate the explanation of topics and learning activities in this report. I do not understand what the average numbers mean in reference to what is acceptable. Four point scale could be better explained. The class is given an average achievement number based on the four point scale but I do not see how many students or section are being summarized. It could be a 100 students or four. Assessment plan list standard of measurement as "class performance in the exams" but does not clarify what percentage of achievement is expected.

Appendix B: Sample of EXCEL Report Summarizing Evaluation of Course Level Assessment

																education outcomes as numbered criteria; one cannot tell how the topics related to gen ed category without going back to the syllabus. There is no explanation as to what the figures mean; ABET criteria listed by letter and numbers adds to the report in a confusing manner. Tables are nicely designed but there is no explanation as to what the numbers mean. After reviewing this report I do not have any idea which gen ed category this course belongs to - maybe category B3? I had to look it up it is A.3 Use gen ed outcomes and numbers. Rewrite assessment plan and 14-15 assessment report in plain English so people in other disciplines can understand what has been achieved if anything.	
Engineering Tech and Comp Sci	Manufacturing & Construction Engineering Tech	IET-20500-01	Gary Steffen	Applied Stat ET	Linda	no		no	no	unclear	There is no determination re: which outcomes are achieved.	There is no action plan or discussion of what will be assessed or changed for the next time the course is taught.	yes	no			
Engineering Tech and Comp Sci	Manufacturing & Construction Engineering Tech	IET-35000-01M	Gary Steffen	Engineering Economy	Linda	unclear	It doesn't matter that the report matches the plan because a non-ABET person would not understand any of it.	no	yes	unclear		No discussion and no plans for improvement.	no	no		Assignments/assessment methods not explained; includes a chart with ABET abbreviations. The reviewer has no idea what the table of results mean. Needs to simplify in non-ABET language. Use of assignments and exams are used but not explained or included. I find this report unacceptable because a normal person cannot understand it.	
VPA		INTR-33000-01	Steve Amidon	Cross Cultural Arch	Linda	yes		no	yes	yes		Data is used appropriately.	no	no		Wonderful report; easy to understand; good analysis. One of the best assessment reports reviewed by this particular reviewer.	
Health and Human Services	Nursing	NUR-30900-01I	Lee-Ellen Kirkhorn	Transcultrl Hlth Care	Linda	yes		no	yes	yes		Data is used appropriately.	no	no		One outcome is assessed four different ways. Easy to understand and very clear reporting of student achievement and recommendations for improvement. Clear and concise – meets all criteria.	

Appendix B: Sample of EXCEL Report Summarizing Evaluation of Course Level Assessment

Health and Human Services	Nursing	NUR-33700-01	Lee-Ellen Kirkhorn	Stats & Data Mngment	Linda	yes		no	yes	yes	Goals were met but the report included one big chart and no discussion.	Data used but not explained.	possible need for improvement to next plan.	no		Use gen ed numbers and add discussion and possible need for improvement to next plan. Very clear explanation of student achievement
Engineering Tech and Comp Sci	Org Leadership and Supervision	OLS-25200-01	Linda Hite	Human Relatn In Organz	Linda	yes		no	yes	yes		Data used to support goal achievement. Includes appropriate plans for improvement with explanation of data.	no	no		Although the assessment reported is labeled 2013-2014 it appears to be for two sections during the 2014-2015 academic years. Data from section taught by LTL (s) not included. However, the report is very clear in all aspects for the one instructor/author who wrote the report. Looks like the author copied the assessment plan and then inserted comments and percentages as appropriate to his or her two sections of the course. It was an easy report to comprehend. Need to have data from LTL(s) as well as fulltime faculty.
Engineering Tech and Comp Sci	Org Leadership and Supervision	OLS-26800-01	Linda Hite	Elements Of Law	Linda	no		no	yes	unclear		Scores presented as grades. No discussion or plan for improvement.	Perhaps instructor is trying to do too much; simplify assessment plan to make clear to people in other discipiles. Consider addressing one or two outcomes per year.	no		Case law and service learning project used as assessment sources; reference to a rubric is made but not provided. Needs to discuss each outcome. The levels of achievement chart might be a rubric but the levels need to be defined.
Engineering Tech and Comp Sci	Org Leadership and Supervision	OLS-45400-01	Linda Hite	Gender & Diversity Mgt	Linda	yes		no	unclear	unclear	Some were; some not met.	Extensive discussion with multiple ideas for improvement including more guidance with assignment, more time on topic, & consultation with CELT.	no	no		Looks like a random sample taken for a total of 12 students? Why not evaluate everyone of such a small sample. Mixed achievement of outcomes. Consultation with Assessment Director requested by author and recommended by reviewer.
Arts and Sciences	Psychology	PSY-12000-01	Carol Lawton	Elementary Psychology	Linda	yes		n/a	yes	yes		Data used to support goal achievement.	no	no	yes	Another 10 item quiz with five items devoted to each outcome. Discusses individual questions and cites examples of two which need to be revised; nice to see examples of questions.
Arts and Sciences	Psychology	PSY-23500-01	Carol Lawton	Child Psychology	Linda	yes		n/a	yes	yes		Data used to support goal achievement.	no	no		Excellent summary and a list of examples; goals met based upon student achievement of 10 exam questions.

Appendix B: Sample of EXCEL Report Summarizing Evaluation of Course Level Assessment

Arts and Sciences	Psychology	PSY-24000-01	Carol Lawton	Intro Social Psych	Linda	yes		n/a	yes	yes		Data used to support goal achievement.	no	no		No changes indicated; 10 item assessment quiz used as the only measurement. Basing gen ed assessment on ten items seems weak to me. Consider explaining number of questions used in assessment or use of more measures or other types of measurement.
Arts and Sciences	Psychology	PSY-33400-01M	Carol Lawton	Cross Cultural Psych	Linda	yes		n/a	yes	yes		Data used to support goal achievement.	no	no		Based on significant project, and essays at midterm and final. Discussion of steady improvement. Objective questions over reading at an analytical level. Nice discussion of student improvement.
Arts and Sciences	Psychology	PSY-33500-01	Carol Lawton	Stereotyping and Prej	Linda	yes		n/a	yes	yes		Data used to support goal achievement.	no	no		Nice bar graph; goal met; nice interpretation of findings; good discussion of planned changes to teaching and measurement questions. Sample questions included.
Arts and Sciences	Psychology	PSY-34500-01	Carol Lawton	Psychology Of Women	Linda	yes		n/a	yes	yes		Data used to support goal achievement.	no	no		Includes sample paper. Very clear report with data about first drafts and rewrite. Good discussion.
Arts and Sciences	Psychology	PSY-35000-05D	Carol Lawton	Abnormal Psychology	Linda	yes		n/a	yes	yes		Data used to support goal achievement.	no	no		Cool chart with re and post test data. Goals met; good focused discussion (only report with pre and post test results)
Arts and Sciences	Psychology	PSY-36200-01	Carol Lawton	Human Dev II Adolescen	Linda	yes		n/a	yes	yes		Data used to support goal achievement.	no	no		Uses a single article summary paper; goals met; discusses specific methods to improve directions and choices of methods which students used. Useful discussion.
Arts and Sciences	Psychology	PSY-36700-01	Carol Lawton	Adult Devel & Aging	Linda	yes		n/a	yes	yes		Data used to support goal achievement.	no	no		Use of lit review and reflection paper. Good discussion of results. Wonderful report; no rubric is included but the summary is clear and easy to understand.
Arts and Sciences	Psychology	PSY-36900-01	Carol Lawton	Devel Life Span	Linda	yes		n/a	yes	yes		Data used to support goal achievement.	no	no		Critical thinking assignments via discussion threads; makes reference to a rubric but it is not included. Discusses need for feedback and more guidance in work with students; length of 14 pages. Includes student comments from discussion threads.
Arts and Sciences	Psychology	PSY-37100-01	Carol Lawton	Death And Dying	Linda	yes		yes	yes	yes		Data used to support goal achievement. Includes appropriate plans for improvement.	no	no		Clear; data used; rubric included two different kinds of learning assignments used to measure results.
Arts and Sciences	Psychology	PSY-42600-01	Carol Lawton	Language Development	Linda	yes		n/a	yes	yes		Data used to support goal achievement. Includes appropriate plans for improvement.	no	no		Lists one essay from exam used to rate achievement; goals met. Nice discussion and plans for improvement including examples of essay questions.

Appendix B: Sample of EXCEL Report Summarizing Evaluation of Course Level Assessment

Arts and Sciences	Psychology	PSY-44400-01	Carol Lawton	Human Sexual Behavior	Linda	yes		n/a	yes	yes		Data used to support goal achievement. Includes appropriate plans for improvement.	no	no		Another 10 item quiz but include a discussion which illustrates that student do retain information at the end of the semester.
Arts and Sciences	Psychology	PSY-46000-01	Carol Lawton	Advanced Abnormal Psy	Linda	yes		n/a	yes	yes		Data used to support goal achievement. Includes appropriate plans for improvement.	no	no		Multiple measures including annotated bibliography and multi -media presentation; students also do a self-assessment. Good discussion of plans.

Appendix C: Sample Rubrics for Foundational Skills Category

	IPFW General Education Rubric (Grounded in AAC&U Value Rubrics) – Written Communication			
IPFW General Education Student Learning Outcomes	**Capstone 4**	**Milestones**		**Benchmark 1**
		3	**2**	
1.1. Produce texts that use appropriate formats, genre conventions, and documentation styles while controlling tone, syntax, grammar, and spelling.	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation	Attempts to use a consistent system for basic organization and presentation.
	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error- free.	Uses straightforward language that generally conveys meaning to readers. The language in the assignment has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage.
1.2. Demonstrate an understanding of writing as a social process that includes multiple drafts, collaboration, and reflection.	Builds on the ideas of others to advance the work of the writing.	Offers solutions or courses of action that advance the work of the writing.	Offers/accepts suggestions to advance the work of the writing.	Communicates ideas but does not advance the work of the writing.
	Completes at least two drafts that show significant changes and reflects on what was learned through the drafting process.	Completes at least two drafts that show significant changes and reflects on their significance.	Completes at least two drafts that show changes and reflects on the changes.	Completes at least two drafts that show changes and reflects on the writing.

Appendix C: Sample Rubrics for Foundational Skills Category

	IPFW General Education Rubric (Grounded in AAC&U Value Rubrics) – Written Communication			
IPFW General Education Student Learning Outcomes	**Capstone 4**	**Milestones**		**Benchmark 1**
		3	**2**	
1.3. Read critically, summarize, apply, analyze, and synthesize information and concepts in written and visual texts as the basis for developing original ideas and claims.	Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth	Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved	Communicates information from sources. The information is fragmented and/or used Inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.
1.4. Demonstrate an understanding of writing assignments as a series of tasks including identifying and evaluating useful and reliable outside sources.	Demonstrates skillful use of high quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing	Demonstrates an attempt to use sources to support ideas in the writing
1.5. Develop, assert and support a focused thesis with appropriate reasoning and adequate evidence.	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate and relevant content to develop and explore ideas through most of the work.	Uses appropriate and relevant content to develop simple ideas in some parts of the work.

Appendix C: Sample Rubrics for Foundational Skills Category

	IPFW General Education Rubric (Grounded in AAC&U Value Rubrics) – Written Communication			
IPFW General Education Student Learning Outcomes	**Capstone 4**	**Milestones**		**Benchmark 1**
		3	**2**	
1.6. Compose texts that exhibit appropriate rhetorical choices, which include attention to audience, purpose, context, genre, and convention.	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).
	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation	Attempts to use a consistent system for basic organization and presentation.

Appendix C: Sample Rubrics for Foundational Skills Category

	IPFW General Education Rubric (Grounded in AAC&U Value Rubrics) – Written Communication			
IPFW General Education Student Learning Outcomes	**Capstone 4**	**Milestones**		**Benchmark 1**
		3	**2**	
1.7. Demonstrate proficiency in reading, evaluating, analyzing, and using material collected from electronic sources (such as visual, electronic, library databases, Internet sources, other official databases, federal government databases, reputable blogs, wikis, etc.).	Accesses information using effective, well designed search strategies and most appropriate information sources.	Accesses information using variety of search strategies and some relevant information sources. Demonstrates ability to refine search.	Accesses information using simple search strategies, retrieves information from limited and similar sources.	Accesses information randomly, retrieves information that lacks relevance and quality.
	Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources after considering the importance (to the researched topic) of the multiple criteria used (such as relevance to the research question, currency, authority, audience, and bias or point of view).	Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources using multiple criteria (such as relevance to the research question, currency, and authority).	Chooses a variety of information sources. Selects sources using basic criteria (such as relevance to the research question and currency).	Chooses a few information sources. Selects sources using limited criteria (such as relevance to the research question).

Appendix C: Sample Rubrics for Foundational Skills Category

	IPFW General Education Rubric (Grounded in AAC&U Value Rubrics) – Oral Communication			
IPFW General Education Student Learning Outcomes	**Capstone** **4**	**Milestones**		**Benchmark** **1**
		3	**2**	
2.1 Use appropriate organization or logical sequencing to deliver an oral message.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation
2.2 Adapt an oral message for diverse audiences, contexts, and communication channels.	Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are unclear and minimally support the effectiveness of the presentation. Language in presentation is not appropriate to audience.
2.3 Identify and demonstrate appropriate oral and nonverbal communication practices.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable.

Appendix C: Sample Rubrics for Foundational Skills Category

	IPFW General Education Rubric (Grounded in AAC&U Value Rubrics) – Oral Communication			
IPFW General Education Student Learning Outcomes	**Capstone** **4**	**Milestones**		**Benchmark** **1**
		3	**2**	
2.4 Advance an oral argument using logical reasoning.	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.	Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly.	Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified.
2.5 Provide credible and relevant evidence to support an oral argument.	A variety of types of supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that partially supports the presentation or establishes the presenter's credibility/authority on the topic.	Insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make reference to information or analysis that minimally supports the presentation or establishes the presenter's credibility/ authority on the topic.

	IPFW General Education Rubric (Grounded in AAC&U Value Rubrics) – Oral Communication			
IPFW General Education Student Learning Outcomes	**Capstone** **4**	**Milestones**		**Benchmark** **1**
		3	**2**	
2.6 Demonstrate the ethical responsibilities of sending and receiving oral messages.	Student can independently apply ethical perspectives/concepts to an ethical question, accurately, and is able to consider full implications of the application.	Student can independently (to a new example) apply ethical perspectives/ concepts to an ethical question, accurately, but does not consider the specific implications of the application.	Student can apply ethical perspectives/concepts to an ethical question, independently (to a new example) and the application is inaccurate.	Student can apply ethical perspectives/ concepts to an ethical question with support (using examples, in a class, in a group, or a fixed-choice setting) but is unable to apply ethical perspectives/concepts independently (to a new example.).
2.7 Summarize or paraphrase an oral message to demonstrate comprehension.	Recognizes possible implications of the oral message for contexts, perspectives, or issues beyond the assigned task within the classroom or beyond the speaker's explicit message (e.g. might recognize broader issues at play, or might pose challenges to the speaker's message and presentation).	Uses the spoken message, general background knowledge, and/or specific knowledge of the speaker's context to draw more complex inferences about the speaker's message and attitude.	Evaluated how oral features (e.g. speech structure or tone) contribute to the speaker's message, draws basic inferences about context and purpose of message.	Apprehends speech appropriately to paraphrase or summarize the information communicated.

Appendix C: Sample Rubrics for Foundational Skills Category

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	IPFW General Education Rubric (Grounded in AAC&U Value Rubrics) – Quantitative Reasoning			
IPFW General Education Student Learning Outcomes	**Capstone** **4**	**Milestones**		**Benchmark** **1**
		3	**2**	
3.1. Interpret information that has been presented in mathematical form (e.g. with functions, equations, graphs, diagrams, tables, words, geometric figures)	Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information. For example, accurately explains the trend data shown in a graph and makes reasonable predictions regarding what the data suggest about future events.	Provides accurate explanations of information presented in mathematical forms. For instance, accurately explains the trend data shown in a graph.	Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to computations or units. For instance, accurately explains trend data shown in a graph, but may miscalculate the slope of the trend line.	Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means. For example, attempts to explain the trend data shown in a graph, but will frequently misinterpret the nature of that trend, perhaps by confusing positive and negative trends.
3.2. Represent information/data in mathematical form as appropriate (e.g. with functions, equations, graphs, diagrams, tables, words, geometric figures).	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding	Competently converts relevant information into an appropriate and desired mathematical portrayal.	Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate.	Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate.

Appendix C: Sample Rubrics for Foundational Skills Category

	IPFW General Education Rubric (Grounded in AAC&U Value Rubrics)– Quantitative Reasoning			
IPFW General Education Student Learning Outcomes	**Capstone** **4**	**Milestones**		**Benchmark** **1**
		3	**2**	
3.3. Demonstrate skill in carrying out mathematical (e.g. algebraic, geometric, logical, statistical) procedures flexibly, accurately, and efficiently to solve problems.	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.)	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.	Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.	Calculations are attempted but are both unsuccessful and are not comprehensive.
3.4. Analyze mathematical arguments, determining whether stated conclusions can be inferred.	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions from this work.	Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work.
3.5. Communicate which assumptions have been made in the solution process.	Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions.	Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate.	Explicitly describes assumptions.	Attempts to describe assumptions.

Appendix C: Sample Rubrics for Foundational Skills Category

	IPFW General Education Rubric (Grounded in AAC&U Value Rubrics)– Quantitative Reasoning			
IPFW General Education Student Learning Outcomes	**Capstone** **4**	**Milestones**		**Benchmark** **1**
		3	**2**	
3.6. Analyze mathematical results in order to determine the reasonableness of the solution.	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions from this work.	Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work.
3.7. Cite the limitations of the process where applicable.	Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions.	Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate.	Explicitly describes assumptions.	Attempts to describe assumptions.
3.8. Clearly explain the representation, solution, and interpretation of the math problem.	Uses quantitative information in connection with the argument or purpose of the work, presents it in an effective format, and explicates it with consistently high quality.	Uses quantitative information in connection with the argument or purpose of the work, though data may be presented in a less than completely effective format or some parts of the explication may be uneven.	Uses quantitative information, but does not effectively connect it to the argument or purpose of the work.	Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support. (May use quasi-quantitative words such as "many," "few," "increasing," "small," and the like in place of actual quantities.)

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