

## INSTRUCTIONAL FACULTY CONSORTIUM COMMITTEE (IFCC)

MATHEMATICS MEETING MINUTES

Date: Thursday, March 17, 2022

Time: 12:30-1:30

Location: WebEx

Meeting Facilitator: Steven Riley

Recorder: Nathalie Dames

## Attendees:

Adrienne Baldwin Chattahoochee Technical College Ahmad Flournoy Angel Williford Ashlee Allen Lanier Technical College Carol Fuller - Columbus Tech Chauncey Keaton Central Georgia Technical College Cristian Cardona - Gwinnett Technical College Deland Docsol -North Ga Technical College Don Davis Southeastern Tech Dr. Calvin Earl Page Erica Sillmon, Gwinnett Technical College Francis Nyandeh Georgia Piedmont Technical College Garnto, Kristen Gregory Allen - Gwinnett Tech Haller, Lanier Technical College Jeff Taylor - Ogeechee Technical College Jim Helms Karen Scott Coastal Pines Technical College Kathryn Kent Dean Southern Regional Technical College Kathryn Mauldin Kathy Griffin - Atlanta Kimberly Carr, Georgia Northwestern Technical College Kristen Garnto - Oconee Fall Line

Larissa Holm-Smith Athens Technical College Vidya Nahar, Athens Technical College Laurie Muldrew Ogeechee Technical College Lecresicia Marion Oconee Fall Line Marlene Haller Matt Pilon - West Georgia Tech Nam Lee from Southern Crescent Tech Nathan Jersett - Wiregrass Nathalie Dames- TCSG Patricia Cooley - Gwinnett Technical College Paul Visintainer Augusta Tech Pedro Perez-Nagera - Columbus Tech Rebecca Snider Savannah Technical College Sarah Davis - Lanier Technical College Seth Gutierrez - Ogeechee Technical College Steven Riley - Chattahoochee Technical College TaTanisha Jackson - West Georgia Technical College Tim Thomas, Lanier Tech Tom Rittweger GNTC

## DISCUSSION:

Call to Order & Roll Call

Dr. Dames initiated the meeting by asking all members to sign in by typing their name and college into the Chat. Then she handed the meeting over to Steven.

Purpose of the meeting is to review the Math 1113 to review the math standards. This is a follow up to the previous meeting to make updates to the Math 1113. 18 people volunteered to work on the subcommittee. The first meeting occurred on November 11. The rational for the updates was the amount of required material that was in the course which included several items were from the prerequisite of College Algebra. There was some concern about removing material so the committee decided to create an optional topics list that would include those duplicated items as well as some additional topics. Some topics were combined because they were too specific. Below is the list of the changes and rational. These items were reviewed as well as the courses competencies.

- Restructured the topics in a more logical order
- Combined a couple objectives
- Rewrote a couple objectives to be more relevant/clear
- Created an optional topics section This was done to avoid removing topics altogether and to, instead, reclassify them as not required for the course.

- Moved objectives we couldn't find covered at USG schools to the newly created optional topics section.
- Removed some (not all) basic objectives that were required in MATH 1111 standards Logarithmic & Exponential Functions material remained untouched
- Added the difference quotient as a required topic
- Updated the "Level of Learning" to be more accurate on a couple objectives.

These items were reviewed as well as the course competencies.

There were a review of the USG partner schools and their syllabus to determine competencies that could be moved to the optional list. None of the USG partners included vectors in their syllabus. Complex numbers are covered in the prerequisite. Logarithms were not moved to optional although they are a part of the College Algebra prerequisite due to the importance of Calculus readiness. During the second meeting changes to the wording of the standards were made as indicated in the appendix below. grammatical changes were made to the course.

During the first meeting on November 12 there were 7 participants: Including Chattahoochee Tech, West Georgia Tech, Savannah Tech, Lanier Tech, Southern Crescent, Central Georgia Tech was a part of the meeting.

The second meeting on 12/3/21 there were 5 participants Lanier, Savanah, Chattahoochee, Southern Crescent, and West Ga Tech

The floor was open to questions.

There was a question from GPTC: Was about if the new course was aligned to a textbook or just other USG colleges. The responses that was the course was not aligned to a particular textbook.

Th group was reminded that we always start course development with the appropriateness of the course competencies and not just what is in a textbook. We are attempting to ensure that the course competencies are appropriate to teach the desired content and prepare students for Calculus I. The course resources should come second to the actual course competencies and learning outcomes not the other way around.

The question was asked about what we do for students that go to school outside of Georgia.

It is the responsibility of the student to determine if the school they would like to attend would accept the credit.

Next the voting process was described and the fact that each college had one vote.

There was a final question about adding more trig to the precalculus course and the importance of complex numbers.

The response was that complex numbers are still in the course as optional because it is a part of the Prerequisite so the faculty for precalculus is able to review that content if they determine it is necessary. For the trig it was asked that they determine what specific additional topics they want to include. And since there is a lot of trig already included once they review it then they should report back any specific items they may like to add in the future.

Below are the results of the vote.

March 17 2022 Math 1113 Vote			
College	Vote in favor of the changes		
Albany Technical College	Absent Yes via email		
Athens Technical College	Yes		
Atlanta Technical College	Yes		
Augusta Technical College	Yes		
Central Georgia Technical College	No		
Chattahoochee Technical College	Yes		
Coastal Pines Technical College	No		
Columbus Technical College	Yes		
Georgia Northwestern Technical College	Yes		
Georgia Piedmont Technical College	Yes		
Gwinnett Technical College	No		
Lanier Technical College	Yes		
North Georgia Technical College	Yes		
Oconee Fall Line Technical College	Yes		
Ogeechee Technical College	Yes		
Savannah Technical College	Yes		
South Georgia Technical College	Absent Yes via email on May 23, 2022		
Southeastern Technical College	Yes		
Southern Crescent Technical College	Yes		
Southern Regional Technical College	Yes confirmed via email May 18, 2022		
West Georgia Technical College	Yes		
Wiregrass Georgia Technical College	Yes		

Those that did not have a yes vote were asked to email their concerns.

Meeting was adjourned.

Minutes Submitted By: Nathalie Dames

MATH 1113			
•	IFCC Subcommittee Review and proprosal of changes for MATH 1113 TCSG State Standards		
Compete	incies		
Oraer	Description	Lecture	
1	Define basic concepts related to functions and their graphs	100	
2	Define and graph linear and quadratic functions and solve applications involving them	100	
3	Define and graph polynomial functions including end behavior and zeros (real and imaginary)	200	
4	Define and graph rational functions including basic characteristics and transformations	100	
5	Perform operations involving functions including finding the inverse of a function	150	
6	Define, evaluate, and graph exponential functions and use them to model phenomena	150	
7	Define a logarithm and use logarithmic properties	100	
8	Define and graph a logarithmic function; find domain and range; and solve applications	100	
9	Define, determine domain and range, and graph the six circular functions	200	
10	Use trigonometric identities to prove other identities and work with the inverse trig. functions	350	
11	Define the six trigonometric functions; use to solve right/oblique triangles and solve	250	
12	Optional Topics	450	
	Totals for Course MATH 1113 -	2250	
	Learning Outcomes		
1	Define basic concepts related to functions and their graphs		
	Description	Learning Domain	Level of Learning
1	Define Function	Cognitive	Knowledge
- 2	Define domain and range of function	Cognitive	Knowledge
2	Define wovimum and minimum values of a function	Cognitive	Knowledge
د ۱	Define maximum and minimum values of a function	Cognitive	Khowieuge
4	Define increasing, decreasing, and constant functions	Cognitive	Knowledge
5	Define end behavior of a function	Cognitive	Knowledge
6	Define zeros and roots of a function	Cognitive	Knowledge
7	Define transformation of a function	Cognitive	Knowledge
8	Define the difference quotient (Added)	Cognitive	Knowledge
2	Define linear and quadratic functions and solve applications involving them		
	Description	Learning Domain	Level of Learning
1	Define a linear function	Cognitive	Knowledge
2	Solve applications that involve linear functions	Cognitive	Application
3		Cognitive	Knowledge
4	Determine the vertex and the maximum or minimum value of a quadratic function	Cognitive	Application
	Determine the vertex and the maximum or minimum value or a quadratic function	Cognitive	Application
C	Solve applications involving quadratic functions	Cognitive	Application
3	Define and graph polynomial functions including end behavior and zeros (real and imaginary)		
	Description	Learning Domain	Level of Learning
1	Define polynomial functions	Cognitive	Knowledge
2	Draw the graph of a polynomial function	Cognitive	Application
3	Determine the end behavior of a polynomial function using the leading term test	Cognitive	Application
4	Determine all the real and imaginary zeros of a polynomial function	Cognitive	Application
5	Draw the granh of transformations of polynomial functions	Cognitive	Annlication
-		Cognitive	Approxion
1	Polynomial sectored functions including basis observatoristics and transformations		
4	Define and graph rational functions including basic characteristics and transformations		
	Description	Learning Domain	Level of Learning
1	Define a rational function	Cognitive	Knowledge
2	Determine the domain and range of a rational function	Cognitive	Application
3	Determine the vertical, horizontal, and oblique asymptotes of a rational function	Cognitive	Application
4	Draw the graph of a rational function	Cognitive	Application
5	Draw the graph of a transformation of a rational function	Cognitive	Application
5	Perform operations involving functions including finding the inverse of a function		
	Description	Learning Domain	Lovel of Learning
1	Description	Compilation	Level of Learning
1	Determine algebraic operations on functions	Cognitive	Application
5	Determine the composition of two functions	Cognitive	Application
6	Compute the value of a composition of two functions given a domain value	Cognitive	Application
7	Determine the inverse of a function	Cognitive	Application
1	Determine the sum of two functions	Cognitive	Application
2	Determine the difference of two functions	Cognitive	Application