The <u>rows</u> are GT pathways competencies from LEAP the <u>columns</u> are CCD Institutional Outcomes

A CCD Graduate Is a Numeric Thinker	A CCD Graduate Is Personally Responsible	A CCD Graduate Is Globally Aware	A CCD graduate is an Effective Communicator	A CCD graduate is a Complex Thinker	A CCD graduate is Effective & Ethical User of Technology
Students will select relevant data and use several methods such as algebraic, geometric, and statistical reasoning to solve problems; they will interpret and draw inferences from data and mathematical models; they are able to represent mathematical information symbolically, graphically, numerically, and verbally.	Students will incorporate ethical reasoning into action; they will explore and articulate the values of professionalism in personal decision-making. They exemplify dependability, honesty, trustworthiness, and accept personal accountability for their choices and actions. Students will exhibit self-reliant behaviors, including: managing time effectively, accepting supervision and	Students will consider the interconnectedness of our community and world; They will understand how cultural differences (such as: beliefs, traditions, religion, ethnicity, sexuality, and gender) impact personal and community participation; they are aware of the social, environmental, and economic impacts of their actions; they evaluate how technology links individuals and communities and are aware of the social, environment, technological, and	Students will convey meaning by writing and speaking coherently and effectively in a way that others understand; Students will write and speak after reflection; students will influence others through writing, speaking, or artistic expression that is appropriate for the context and audience; students will use appropriate syntax and grammar; students will listen attentively to others and respond appropriately. Students will understand and apply conventions of effective written and	Students will explore and evaluate multiple sources of information, which they will synthesize to solve problems; they will extract meaning from texts, instruction, experience, and other relevant sources to construct new problem-solving approaches based on their insights.  Students will make relevant connections between classroom and out-of-classroom learning.	Students will exhibit technological literacy and the skills to effectively use it; they will demonstrate the responsible application of intellectual property and privacy; students will use technology ethically and effectively to communicate, solve problems, and complete tasks; students will remain current with technological innovations.

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		direction as needed, perseverance, valuing contributions of others, and holding themselves accountable for obligations.	economic impacts of their actions.	oral communication in academic, public, and professional discourse.		
Civil		Civic Knowledge	Diversity of			
Engagement		A student should	Communities &			
SS1 Competency in civic engagement refers to actions wherein students participate in activities of personal and public concern that are both meaningful to the student and socially beneficial to the		be able to connect disciplinary knowledge to civic engagement through one's own participation in civic life, politics, and/or government.  Rubric  Civic Values & Commitment A student should	Cultures (required for SS1) A student should be able to discuss how their own attitudes and beliefs compared to those of other cultures and communities. Rubric  Civic Values & Commitment A student should be able to examine the	Civic Communication A Student should be able to express, listen, and adapt ideas and/or messages based on others' perspectives. Rubric		
community. Civic		be able to create	role of established			
engagement is		a personal value	systems and			

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"working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes." (Excerpted from Civic Responsibility and Higher Education, edited by Thomas Ehrlich, published by Oryx Press, 2000, Preface,		system that aligns with civic actions and addresses the responsibilities of an active citizen in society. Rubric  Civic Reflection through Civic Action A student should be able to reflect on one's participation in and contribution to civic activity. Rubric	structures that reproduce patterns of support and/or patterns of inequity over time Rubric			

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page vi.) The rubric can be found <u>here</u> .						
Creative Thinking  AH 1 Competency in creative thinking represents both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking.					Demonstrate Originality and Ingenuity (required for AH1)  A student should be able to form an exemplar that meets specifications as indicated by the context. Rubric  Take Risks A student should be able to go beyond the original parameters of an assignment by introducing new materials, tackling controversial topics, and/or advocating ideas or solutions within the context of the discipline Rubric	

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The rubric can be found here.					Solve Problems A student should be able to articulate the rationale for selecting a given solution to the problem. A student should be able to recognize consequences of their suggested solution the problem. 4.	
					Embrace Contradictions (required for AH1) A student should be able to Incorporate alternate, divergent, or contradictory perspectives or ideas within the context of the discipline and the shape of the work. Rubric	
					Think Innovatively (required for AH1) A student should be able to create an	

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					innovative or unique idea, question, format, or product that pushes existing boundaries.  Rubric	
					Connect, Synthesize & Transform Ideas A student should be able to connect / synthesize ideas or solutions into a coherent whole work. Rubric	
Critical Thinking  HI1, SS1, SS2, SS3, AH3 Competency in critical thinking addresses a student's ability to analyze					Explain an Issue (required for AH3, SS1, SS2 & SS3) A student should be able to use information to describe a problem or issue. Rubric	
information and ideas from multiple					Utilize Context (required for AH3, SS1, SS2 & SS3)	

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perspectives and articulate an argument or an opinion or a conclusion based on their analysis. You can find the rubric here.					A student should be able to evaluate the relevance of context when presenting a position. A student should be able to identify assumptions. A student should be able to analyze one's own and others' assumptions. Rubric	
					Formulate an Argument (required for HII, & SS1) A student should be able to ask a question relevant to the discipline. A student should be able to synthesize perspectives that answer it. A student should be able to take a specific position.	

A CCE Graduate Numer Thinke	Is a Is Personally	A CCD Graduate Is Globally Aware	A CCD graduate is an Effective Communicator	A CCD graduate is a Complex Thinker	A CCD graduate is Effective & Ethical User of Technology
				Rubric Incorporate Evidence (required for HI1) A student should be able to interpret/ evaluate sources to develop an analysis or synthesis. Rubric	
				Understand Implications & Make Conclusions (required for HI1, SS1, SS2, SS3 & AH3) A student should be able to establish a conclusion that is tied to the range of information presented. A student should be able to reflect on implications and consequences of stated conclusion. Rubric	

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Diversity &			Build Self-			
Global Learning			Awareness			
1			(required for <u>SS2</u> &			
SS2, SS3			<u>SS3</u> )			
(this competency			A student should be			
will change)			able to demonstrate			
Competency in			how their own			
Diversity &			attitudes,			
Global Learning			behaviors, or beliefs			
refers to a			compare or relate to			
student's ability			those of other			
to critically			individuals, groups,			
analyze and			communities, or			
engage with			cultures.			
complex,			Rubric			
interdependent						
global systems			Examine			
and legacies			Perspectives			
(such as natural,			(required for SS2 &			
physical, social,			<u>SS3</u> )			
cultural,			A student should be			
economic, and			able to examine			
political) and			diverse perspectives			
their implications			when investigating			
for people's lives			social and			
and the earth's			behavioral topics			
sustainability.			within natural or			
Through global			human systems.			
learning,			Rubric			

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students should 1) become informed, open- minded, and responsible people who are attentive to diversity across the spectrum of differences, 2) seek to understand how their actions affect both local and global The rubric can be found here.			Address Diversity (required for SS2 & SS3) A student should be able to make connections between the worldviews, power structures, and experiences of individuals, groups, communities, or cultures, in historical or contemporary contexts.  Rubric			
			Share Personal & Social Responsibility A student should be able to address ethical, social, and environmental challenges within local or global systems			

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		A student should be able to identify a range of actions or solutions informed by one's sense of personal and civic responsibility <a href="Rubric">Rubric</a>			
		Understand Global Systems A student should be able to examine the historical and contemporary roles, interconnections, and differential aspects of human organizations			
		A student should be able to explore impacts and actions on global systems within the human and the natural worlds. A student should be able to apply			

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			knowledge to contemporary global contexts (suggested for service learning/enrichment programs/ study abroad)  A student should be able toi multiple disciplinary perspectives (such as cultural, historical, and scientific) when identifying solutions to contemporary global challenges. Rubric			
Information Literacy  HI1 Information literacy refers to					Determine the Extent of Information Needed A student will be able to define the scope of	Access the Needed Information A student will be able to Access information using effective, well-designed search strategies
the set of skills needed to find, retrieve, analyze,					the research question/ thesis/ main idea	A student will be able to Access needed information by using

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and use information. Competency in information literacy represents a student's ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use that information for the task or problem at hand. The rubric is here.					A student will be able to select sources that directly relate to the key concepts or answer the research question(s)  Evaluate Information Critically (required for HII) A student should be able to utilize a variety of information sources appropriate to the scope and discipline of the research question A student should be able to Consider the importance of multiple criteria, such as relevance to the research question, currency, authority, audience, and bias or point of view, when evaluating information source	appropriate and relevant sources  Use Information Ethically & Legally (required for HII) A student should be able to demonstrate a full understanding of the ethical and legal restrictions on the use of information from a variety of sources through correct citation practices.  Rubric

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				Rubric	
				Use Information Effectively to Accomplish a	
				Specific Purpose (required for HI1) A student should be	
				able to synthesize information from	
				sources to fully achieve a specific	
				purpose <u>Rubric</u>	

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Inquiry & Analysis  SC1, SC2 Inquiry is a systematic process of exploring issues/ objects/ works through the collection and analysis of evidence that result in informed conclusions/ judgments. Analysis is the process of breaking complex topics or issues into parts to gain a better understanding of them. The rubric can be found here.			Integrate Various Points of View A student should be able to integrate information that represents various points of view and/or approaches. Rubric	Identify a Topic A student should be able to identify a discipline related topic that is focused and manageable to explore and evaluate. Rubric	Incorporate Information & Existing Research A student should be able to incorporate information from relevant sources directly relating to the topic. Rubric  Select or Develop a Design Process (required for SC1 & SC2) A student should be able to select or develop elements of the methodology or theoretical framework to solve problems in a given discipline. Rubric  Analyze & Interpret Evidence (required for SC1 & SC2)	

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					A student should be able to examine evidence to identify patterns, differences, similarities, limitations, and/or implications related to the focus. A student should be able to utilize multiple representations to interpret the data. Rubric	
					Draw Conclusions (required for SC1 & SC2) A student should be able to state a conclusion based on findings. Rubric	
Oral/ Presentational Communication AH4 Competency in oral				Illustrate Organization A student should be able to implement an organizational pattern that results in a		Integrate Content & Supporting Material A student should be able to incorporate a variety of types of supporting materials (explanations,

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communication represents a student's ability to deliver a well-prepared and purposeful presentation grounded in credible information and organized effectively The rubric is here.				cohesive presentation (specific introduction and conclusion, sequenced material within the body, and transitions). Rubric  Develop a Central Message (required of AH4) A student should be able to develop a central message using the content and supporting materials. Rubric		examples, illustrations, statistics, analogies, quotations) from authorities. A student should be able to make reference to and connect information through analysis that supports the presentation while establishing the presenter's credibility/ authority on the topic. A student should be able to ability to manage visual aids with appropriate technology.  Rubric
				Address Language (required for AH4) A student should be able to employ language that enhances the presentation. A student should be able to incorporate language that is		

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				appropriate to the audience. 4.		
				Execute Delivery (required for AH4) A student should be able to demonstrate performance skills (posture, gesture, eye contact, and vocal expressiveness) to share content with/present content to a particular audience for a specific occasion and purpose. Rubric		
Problem	Define a					
Solving MA1, MA2, MA3, MA4, SC1?, SC2?	Problem a) Construct a detailed and comprehensive					
This competency	problem					
is not currently	statement or					
required, but	clearly					
may be in future.	describe the					
Competency in	goal					
problem solving	b) Identify					
represents a	relevant					

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student's ability	contextual					
to design,	factors					
evaluate, and	<u>Rubric</u>					
implement a						
strategy to						
answer question	Propose a					
or achieve a	Strategy					
goal.	a) Identify					
The rubric can be	reasonable					
found <u>here</u> .	approaches to					
	solving the					
	problem within					
	the given					
	context					
	Rubric					
	Evaluate					
	Potential					
	Strategies					
	a) Provide an					
	evaluation of					
	the potential					
	strategy(ies)					
	which may					
	include:					
	i. the history of					
	the problem,					
	ii. the logic					
	behind the					

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potential strategy(ies), iii. the feasibility of the proposed strategy(ies) and iv. the potential impacts of the proposed strategy(ies) b) Choose a feasible strategy Rubric					
Apply a Strategy Use chosen approach(es) to solve the problem Rubric					
Evaluate Results a) Discuss and review results					

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	relative to the					
	context of the					
	problem.					
	b) Make					
	recommendati					
	ons for further					
	work (where					
	applicable)					
	Rubric					
Quantitative	Interpret					
Literacy	Information					
MA4 664 663	(required for					
MA1, SC1, SC2	MA1, SC1 &					
Competency in	<u>SC2</u> )					
quantitative	A student					
literacy represents a	should be able					
student's ability	to explain					
to use	information					
quantitative	presented in					
information and	mathematical					
mathematical	forms (e.g.,					
analysis to make	equations,					
connections and	graphs,					
draw	diagrams,					
conclusions.	tables, words).					
Students with	,					
strong	Represent					
quantitative	Information					

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literacy skills	(required for					
understand and	MA1, SC1 &					
can create	<u>SC2</u> )					
sophisticated						
arguments	A student					
supported by	should be able					
quantitative	to convert					
evidence and can	information					
clearly	into and					
communicate	between					
those arguments	various					
in a variety of	mathematical					
formats (using	forms (e.g.,					
words, tables,	equations,					
graphs,	graphs,					
mathematical	diagrams,					
equations, etc.).	tables, words).					
The rubric can be						
found <u>here</u> .	Perform					
	Calculations					
	(required for					
	<u>MA1</u> )					
	A student					
	should be able					
	to solve					
	problems or					
	equations at					
	the					

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	appropriate					
	course level.					
	A student					
	should be able					
	to use					
	appropriate					
	mathematical					
	notation.					
	A student					
	should be able					
	to solve a					
	variety of					
	different					
	problem types					
	that involve a					
	multi-step					
	solution and					
	address the					
	validity of the					
	results.					
	Ammle 9					
	Apply &					
	Analyze Information					
	(required for					
	MA1) A student					
	should be able					
1	to make use of					

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graphical					
objects (such					
as graphs of					
equations in					
two or three					
variables,					
histograms,					
scatterplots of					
bivariate data,					
geometrical					
figures, etc.)					
to supplement					
a solution to a					
typical					
problem at the					
appropriate					
level.					
A student					
should be able					
to formulate,					
organize, and					
articulate					
solutions to					
theoretical and					
application					
problems at					
the					
appropriate					
course level.					

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A student					
should be able					
to make					
judgments					
based on					
mathematical					
analysis					
appropriate to					
the course					
level.					
1.5.1.5.1.					
Communicate					
Using					
Mathematical					
Forms					
(required for					
<u>MA1</u> )					
A student					
should be able					
to express					
mathematical					
analysis					
symbolically,					
graphically,					
and in written					
language that					
clarifies/justifie					
s/summarizes					
reasoning					

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	(may also include oral					
	communication					
	).					
	Address					
	Assumptions					
	(required of					
	statistics courses only)					
	A student					
	should be able					
	to describe					
	and support					
	assumptions in					
	estimation, modeling, and					
	data analysis,					
	used as					
	appropriate for					
	the course.					
Written				Employ Rhetorical		
Communication				Knowledge		
CO1, CO2, CO3, AH2				(required for CO1, CO2, CO3)		
7112				A student should be		
Competency in				able to demonstrate		
written				an understanding of		
communication is				audience, purpose,		

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a student's ability to write and express ideas across a				genre, and context that is responsive to the situation.		
variety of genres and styles. Written communication abilities develop over time through layered, interactive, and continual				Develop Content (required for CO1, CO2, CO3 & AH2) A student should be able to create and develop ideas within the context of the situation and the assigned task(s).		
processes and experiences across the curriculum. The rubric is here.				Apply Genre & Disciplinary Conventions (required for CO1, CO2, CO3 & AH2) A student should be able to apply formal and informal conventions of writing, including organization, content,		
				presentation, formatting, and stylistic choices, in		

A C Gradua Num Thin	te Is a Is Person	ally A CCD Graduate	A CCD graduate is an Effective Communicator	A CCD graduate is a Complex Thinker	A CCD graduate is Effective & Ethical User of Technology
			particular forms and/or fields.		
			Use Sources & Evidence (required for CO1, CO2, CO3 & AH2)		
			A student should be able to evaluate, apply, and synthesize evidence and/or sources in support of a claim, following an appropriate documentation system.		
			Control Syntax & Mechanics (required for CO1, CO2, CO3) A student should be able to demonstrate proficiency with conventions, including spellings, grammar,		
			mechanics, and word choice appropriate to the writing task.		

### **Key to Abbreviations**

AH – Arts and Humanities

AH1 - Arts and Expression

AH2 – Literature and Humanities

AH3 – Ways of Thinking

AH4 – World Languages

HI – History

MA – Mathematics

MA1 – Mathematics

MA2 – not yet defined

MA3 – not yet defined

MA4 - not yet defined

- SC Natural and Physical Sciences
  - SC1 Courses with Required Laboratory
  - SC2 Lecture Course without Required Laboratory
- SS Social and Behavioral Sciences
  - SS1 Economic or Political Systems
  - SS2 Geography
  - SS3 Human Behavior, Culture, or Social Frameworks
- CO Written Communication
  - CO1 Introductory Writing Course
  - CO2 Intermediate Writing Course
  - CO3 Advanced Writing Course