

Fall 2016-Fall 2017 Course Assessment Reports

COCONINO COMMUNITY COLLEGE

May 15, 2018

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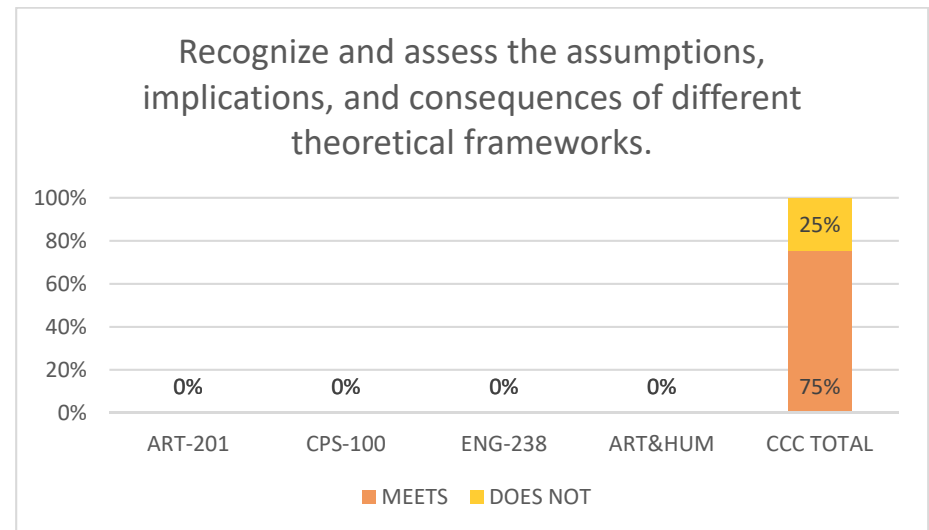
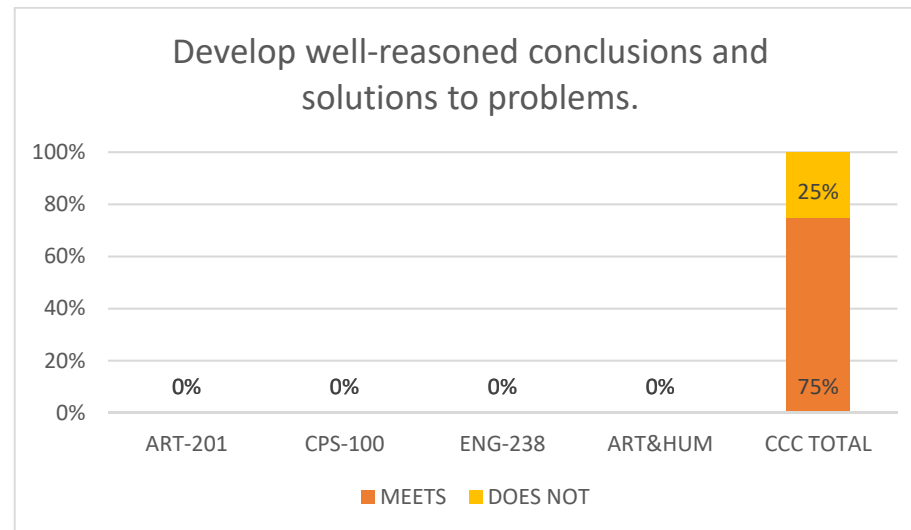
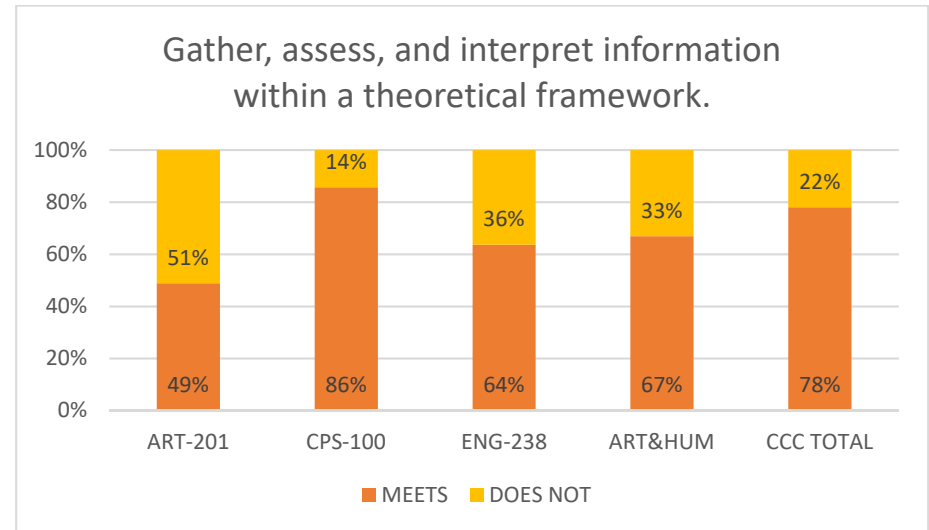
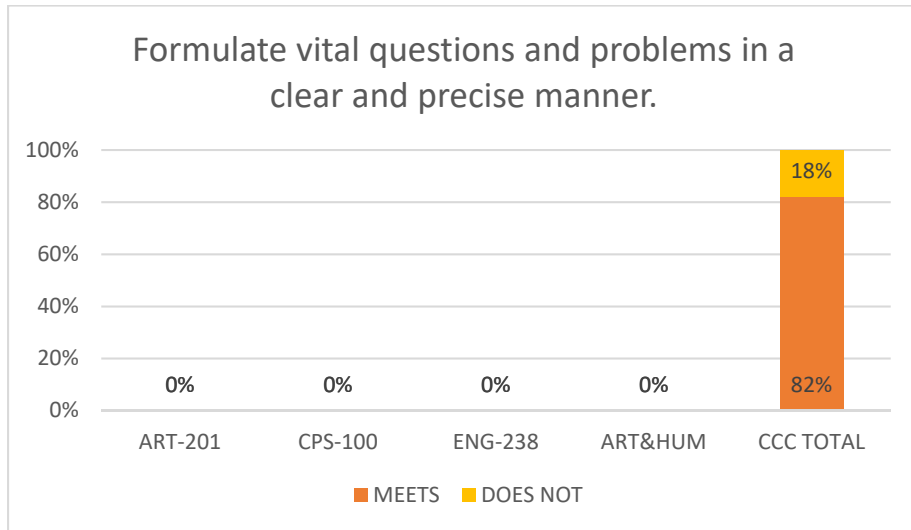
Fall 2016-Fall 2017 Course Assessment Reports

Arts & Humanities

FALL 2016 GENERAL EDUCATION CRITICAL THINKING

Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

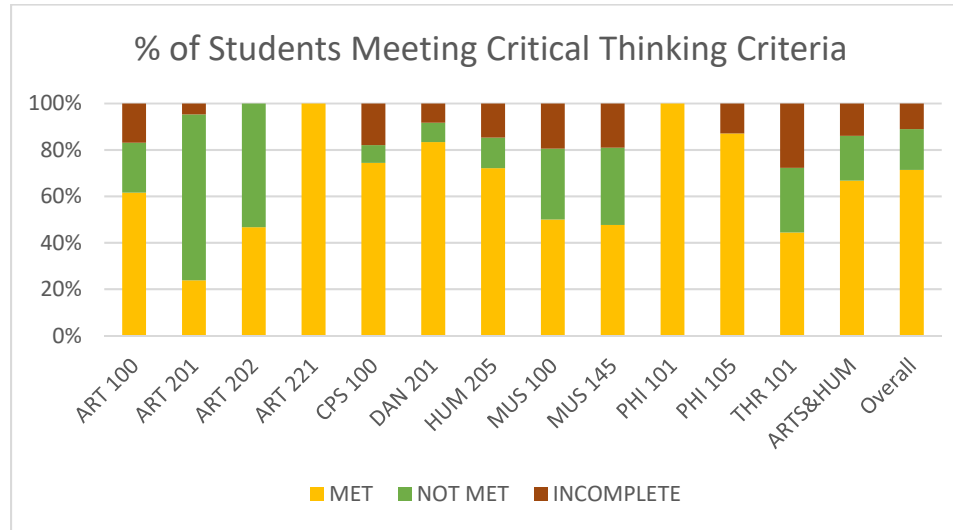
ARTS & HUMANITIES



SPRING 2017 GENERAL EDUCATION CRITICAL THINKING

Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

ARTS & HUMANITIES



COURSE	MET	NOT MET	INCOMPLETE	N =
ART 100	62%	22%	17%	3
ART 201	24%	71%	5%	1
ART 202	47%	53%	0%	1
ART 221	100%	0%	0%	1
CPS 100	74%	8%	18%	1
DAN 201	83%	8%	8%	1
HUM 205	72%	13%	15%	3
MUS 100	50%	31%	19%	1
MUS 145	48%	33%	19%	1
PHI 101	100%	0%	0%	1
PHI 105	87%	0%	13%	2
THR 101	44%	28%	28%	1
ARTS&HUM	67%	19%	14%	17
Overall	71%	18%	11%	115

ARTS & HUMANITIES Assessment Criteria

ART 100

- "Meets": at least two criteria and related evidence are included. "Does Not Meet": less than two criteria and related evidence are included.
- Those who scored a grade greater than 73 out of 100 on the assessment.

ART 202

- Those who scored a grade greater than 73 out of 100 on the assessment.

ART 221

- Those who scored a grade greater than 73 out of 100 on the assessment.

CPS 100

- If students earned 85 points or more on this writing assignment, I considered them successful or "meets."

DAN 201

- If they completed their term paper, following the guidelines given.

MUS 100

- The criteria used to determine how a student "Meets" or "Does Not Meet" critical thinking for the assignment was based on how well the students were able to show their thought processes in determining the answer to the assignment. In other words, they met the critical thinking criteria even if they did not necessarily get the correct answer. The process by which they reached their conclusions were more important than the conclusion in and of itself.

MUS 145

- The criteria used to determine how a student "Meets" or "Does Not Meet" critical thinking for the assignment was based on how well the students were able to show their thought processes in determining the answer to the assignment. In other words, they met the critical thinking criteria even if they did not necessarily get the correct answer. The process by which they reached their conclusions were more important than the conclusion in and of itself.

PHI 101

- Critical Thinking Checklist
 - Identify what's important:
 - What are the key ideas, problems, arguments, observations, findings, conclusions?
 - What evidence is there?
 - Distinguish critical from other types of writing (eg. descriptive); fact from opinion; bias from reason
 - Evaluate what you find:
 - Explore the evidence - does it convince?
 - What assumptions are being made and inferences drawn?
 - Is there engagement with relevant, up to date research?
 - How appropriate are the methods of investigation?
 - Is there a consistent and logical line of reasoning?
 - Do you agree with what's being said? Why?
 - How is language being used (emotive, biased etc.)?

- Look beyond what you're reading/hearing:
 - What other viewpoints, interpretations and perspectives are there? What's the evidence for these? How do they compare?
 - How does your prior knowledge and understanding relate to these ideas, findings, observations etc.?
 - What are the implications of what you're reading/hearing?
- Clarifying your point of view:
 - Weigh up the relevant research in the area
 - Find effective reasons and evidence for your views
 - Reach conclusions on the basis of your reasoning
 - Illustrate your reasons with effective examples

PHI 105

- Were they able to sufficiently address each step in a critically thoughtful manner? Did each step logically follow the preceding one? Were there gaps in the process that needed to be addressed? Were they able to evaluate their own biases and assumptions in a fair and thoughtful fashion? Was their conclusion reasonable?
- Did the student consider the many sides to an argument or position? Were they able to sufficiently address the ethics of potential solutions to the question in a critically thoughtful manner? Were there gaps in their thought process that needed to be addressed? Was their conclusion reasonable?

THR 101

- The student have to observe a play and report on the elements in detail-- set, costuming, acting.

ARTS & HUMANITIES Critical Thinking Definitions

•Gather, assess, and interpret information within a theoretical framework •Develop well-reasoned conclusions and solutions to problems •Recognize and assess the assumptions, implications, and consequences of various theoretical frameworks

The ability to remove oneself from suspension of disbelief and see the manipulations of theater; to see the "man behind the curtain" in the Wizard of Oz and realize that the use of ensemble art (and any art for, for that matter) involves non-conscious attempts to persuade.

Critical thinking is that mode of thinking — about any subject, content, or problem — in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it. Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use.

Critical thinking means that they gather information throughout the semester about various figures in Dance History. Then they select one of those people to write a term paper about. They have a basic knowledge of that person and can research more on them to gain an in-depth knowledge.

For this project - Develop well-reasoned conclusion and solutions to problems and gather, assess, and interpret information

Critical thinking in our class can be defined as the skill of applying, analyzing, and evaluating information we have explored. It is taking the information and examining something that has not been heard before and developing, through critical listening, a reasonable understanding of the sound material.

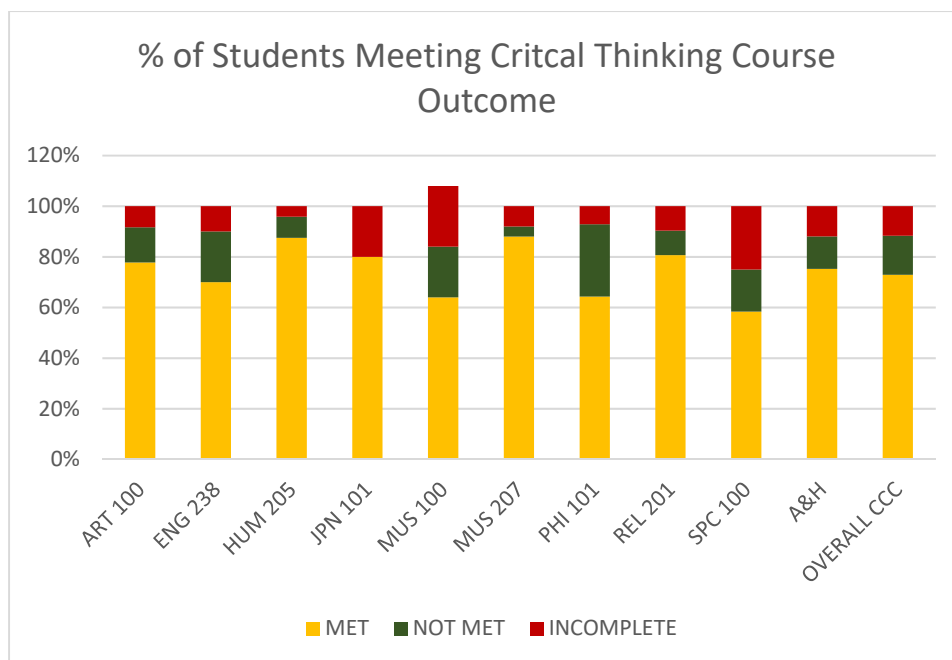
Applying specific criteria and citing specific evidence in the evaluation and interpretation of art work.

This is an Ethics class in the Philosophy department. Critical thinking is a major part of each semester. Students carefully consider and critically evaluate the many nuances of applied ethics every week, on a variety of topics.

FALL 2017 GENERAL EDUCATION CRITICAL THINKING

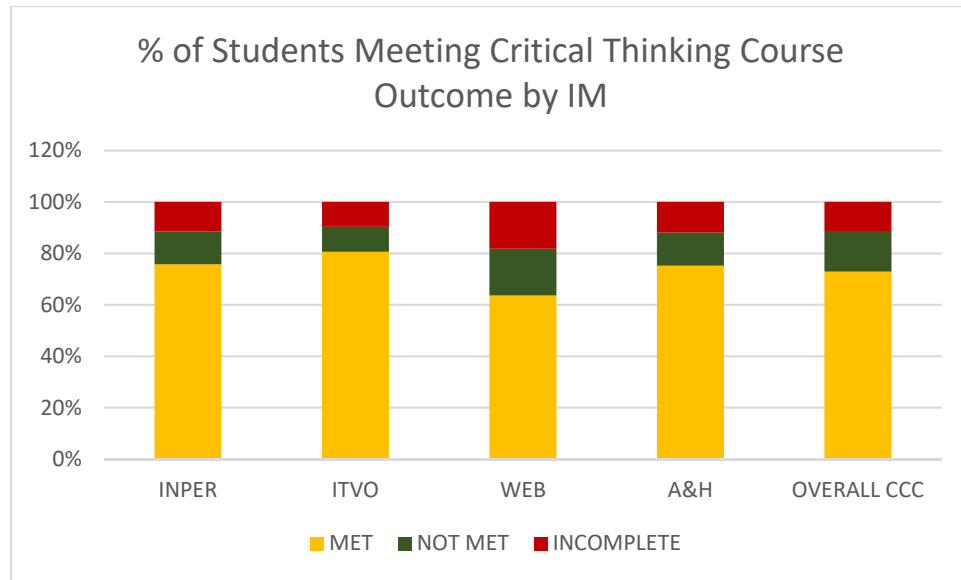
Program-Level Outcome: Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

ARTS & HUMANITIES (A&H) BY COURSE



COURSE	MET	NOT MET	INCOMPLETE	N =
ART 100	78%	14%	8%	2
ENG 238	70%	20%	10%	1
HUM 205	88%	8%	4%	1
JPN 101	80%	0%	20%	1
MUS 100	64%	20%	24%	1
MUS 207	88%	4%	8%	1
PHI 101	64%	29%	7%	1
REL 201	81%	10%	10%	1
SPC 100	58%	17%	25%	1
A&H	75%	13%	12%	10
OVERALL CCC	73%	15%	12%	68

ARTS & HUMANITIES (A&H) BY INSTRUCTIONAL METHOD



IM	MET	NOT MET	INCOMPLETE	N =
INPER	76%	13%	12%	7
ITVO	81%	10%	10%	1
WEB	64%	18%	18%	2
A&H	75%	13%	12%	10
OVERALL CCC	73%	15%	12%	68

A&H COURSE-LEVEL OUTCOMES MEASURED

- ART 100** Identify the many ways the art of today relates to the art of the past
Describe the interaction between individuals, their culture, and the physical environment.
- ENG 238** * analyze rhetorical, historical , and cultural aspects of the works;
- HUM 205** 2. develop skills in analyzing and synthesizing information;
4. develop skills which will enable them to become aware of faulty reasoning;
- JPN 101** Derive meaning from written material where context and/or extralinguistic background knowledge are supportive.
- MUS 100** 3. Write formal analysis of musical works.
- MUS 207** * Identify various styles of American popular music
* Analyze and discuss the evolution of musical styles in America, their sources and influences
* Analyze and discuss the broad range of cultural and historical influences on the music of

America, and the contributions of various ethnic groups and women

* Analyze and discuss recurring themes and contemporary trends in American Popular music.

PHI 101 Demonstrate an ability to formulate philosophical arguments with an awareness of key components and principles.

REL 201 Recognize both globally and locally the impact of diverse religious traditions upon each other and their respective cultures.

SPC 100 1, 7, 10

A&H COURSE CHANGES

ART 100 I think that the students completed this project admirably well and, at this time, I don't think any changes are necessary.

No action was necessary because all students who engaged in completing the project understood and carried out the assignment specifications.

ENG 238 Although at first glance it seems my students did well, this was a high-achieving class. Based on the depth of analysis I had seen in discussions, I expected more students to exceed the minimum expectations. The next time I teach the course, I plan to tie practice analyses (through discussions) back to the directions, make samples easily clickable from the essay directions, focus on the structure of analysis in the peer workshop, and ensure my directions are clear.

HUM 205 No action is necessary because the teaching methodology is time tested

JPN 101 Students were given 3 tries to realize their mistakes and correct them on their own. Thinking critically to make the corrections on their own was a beneficial learning approach for the students who completed the assignment.

MUS 100 Reflecting back on this assessment/assignment and the last two semesters I have had my students do this critical thinking assignment, I have been impressed by how sincerely and thoughtfully the students have approached this assignment. In light of how the assignment pushes them to focus and think intently on pieces and utilize the listening and critical thinking skills we have worked on throughout the semester, I am hoping to develop similar assignments (not used for this assessment) that push the students to listen and critically evaluate music. I hope to make this assignment (in varied forms) a tool I utilize more than once a semester.

MUS 207 I did change a few things for this semester. I used to require 3 papers and 6 quizzes, but this semester I changed it to 2 papers and 8 quizzes. I also gave them an option to substitute an oral presentation for a paper, if they wished. I hoped to increase student involvement in the class. The more frequent quizzes help me to better assess progress and give the students more leeway to do well even if they have an off day. Furthermore, for a music class, I felt that

more listening quizzes and questions about those examples better reflect what we're trying to learn. The papers give them a chance to delve deeper into and do some critical thinking about a particular topic. Still, I don't want MUS 207 to be a writing class, so I wanted to lessen the emphasis on writing assignments. I also increased the percentage of the quizzes to 30% of their grade and reduced the papers to 20% (instead of vice versa, as in previous semesters).

Another change I made this semester was to give the students a study guide for their final exam. I had not done this for past semesters, and felt that perhaps I was being unclear about what they should expect on their final exam. Having graded their final exams, I think this was helpful to many students.

PHI 101 I want to spend more time next semester systematically diagramming the views of the authors who are under discussion and I also want to spend more time breaking down the texts in the classroom together so as to model the skills of critical interpretation. At present, the discussions we have are based on the relevant texts but I do not dedicate a large amount of class time to digging through the texts together. Given the inability of many students to perform well on these interpretive tasks, tasks which are fundamental to the more advanced skills of responding to the text, I realize I need to devote more time here.

REL 201 This paper was a vast improvement over their earlier paper. Students knew what was expected and how they would be graded and we definitely went over the assignment criteria in class to help explain it in great detail before the assignment was given.

SPC 100 This exercise went as planned. I do not believe it needs to be adjusted.

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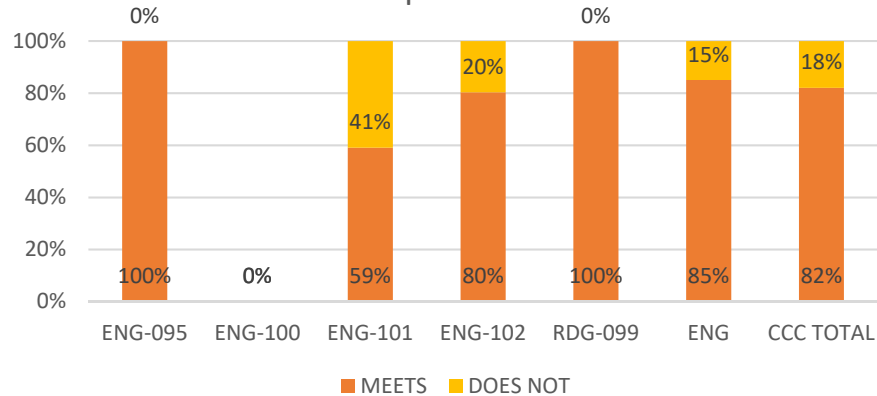
English and Writing Intensive

FALL 2016 GENERAL EDUCATION CRITICAL THINKING

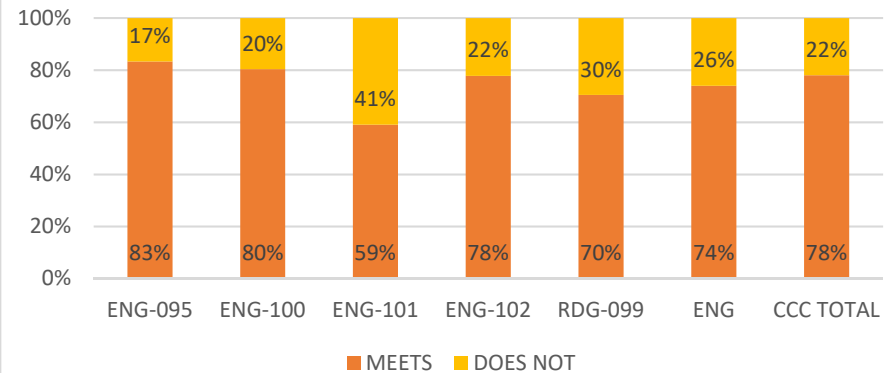
Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

ENGLISH

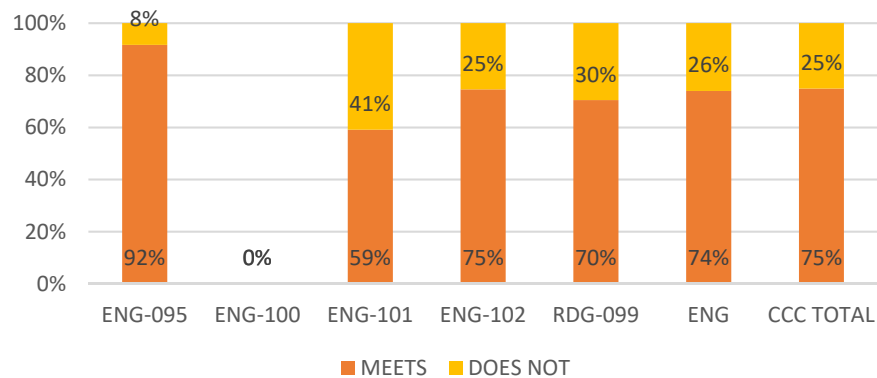
Formulate vital questions and problems in a clear and precise manner.



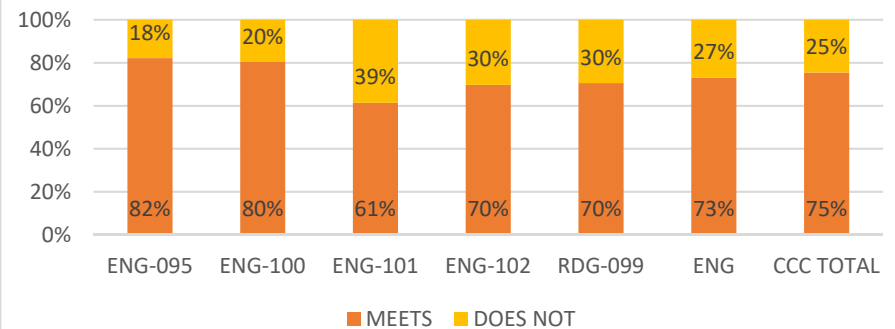
Gather, assess, and interpret information within a theoretical framework.



Develop well-reasoned conclusions and solutions to problems.



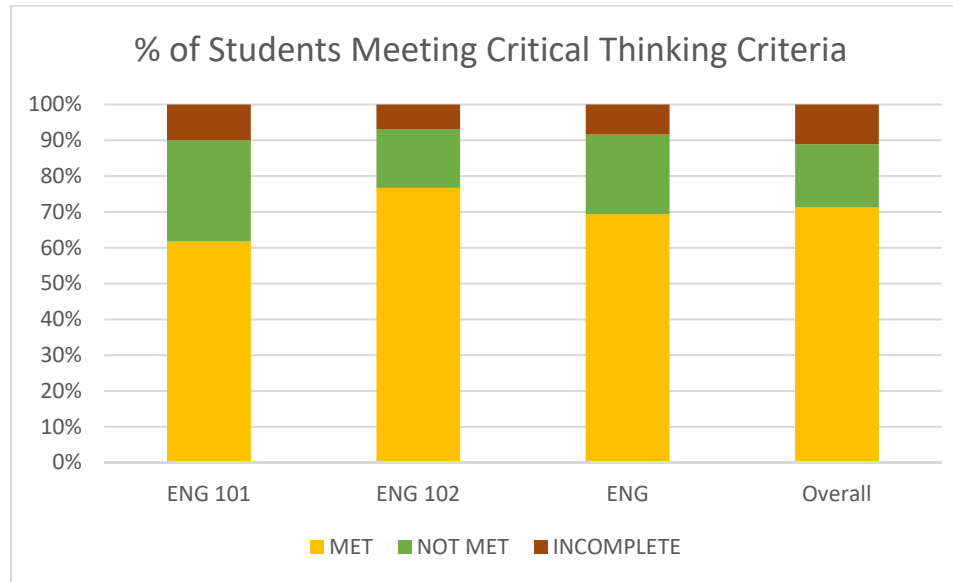
Recognize and assess the assumptions, implications, and consequences of different theoretical frameworks.



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Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

ENGLISH



COURSE	MET	NOT MET	INCOMPLETE	N =
ENG 101	62%	28%	10%	9
ENG 102	77%	16%	7%	11
ENG	69%	22%	8%	20
Overall	71%	18%	11%	115

ENGLISH Assessment Criteria

ENG 101

- I set up the criteria of my own grading rubric so that an A or B would meet all of the critical thinking rubric criteria, that a C would meet 1 or 2 of the criteria, and that a D or F would meet none of the criteria.
- The students identify the both the strengths and weaknesses of their selected character. The students use these qualities to convince their audience their argument is stronger.
- If the students found fault within the argument presented, or presented a separate argument in support of the essay's conclusions, I considered the criteria met.
- As for my how I evaluated the students' use of critical thinking, I followed "The Approaches to Critically Thinking" handout provided by CCC Faculty. For my Eng 101 course, it was a blend of "Approach Two: Asking the Right Questions" and "Approach One: The Reductionist Approached," pinpointing "Concepts": use of rhetorical strategies – logos, ethos, pathos, and so forth.
- For Essay 2, students had to analyze the rhetorical strategies of a persuasive text and explain why those strategies matter in Essay 2 Prep and Essay Pass/Fail assignments. Since identifying rhetorical strategies and making and supporting a claim about those rhetorical strategies involves critical thinking (recognizing logical thinking, obstacles to it, and identifying and evaluating these in others' work), students whose Essay 2 assignments made and supported a claim targeting the rhetorical strategies used in the primary text demonstrated critical thinking, while those whose Essay 2 assignments made and supported a claim about the topic of the primary text instead, did not yet demonstrate critical thinking.
- I've attached the rubric I used to grade the rhetorical analysis. Students who earned a 75% or better are considered "adequate" or "meets"; those earning below 75 % I assessed as needing a lot of work, failing or missing.
- They researched and wrote a critical analysis for a commercial of their choice. They also created and presented a presentation about their analysis.

ENG 102

- As for my how I evaluated the students' use of critical thinking, I followed "The Approaches to Critically Thinking" from the handout provided by CCC Faculty. As for the Eng 102 essay, the model followed was "Approach Two: Asking the Right Questions."
- Either the student did or did not perceive the use of rhetoric.
- Making correct inferences from data • deducing conclusions from information or data provided • interpreting whether conclusions are warranted on the basis of data given • evaluating the validity of an argument
- I evaluated whether critical thinking was demonstrated by assessing the student's evidence that s/he examined the chosen issue by asking a valid, arguable research question; engaging in critical questioning of assumptions and reasoning related to the topic; answering the research question based on a variety of academic evidence; creating a logical argument based on a variety of academic evidence; critical evaluation of research sources; and drawing reasonable conclusions based on the evidence.
- If the students found fault within the argument presented, or presented a separate argument in support of the essay's conclusions, I considered the criteria met.
- Summarizes problem, question, or issue. Demonstrates a definition of the problem, description of the solution, counterarguments to the solution, and alternate solutions. Considers context and assumptions. Communicates own perspective, hypothesis, or position. Analyzes supporting data and evidence. Uses other perspectives and positions. Assesses conclusions, implications, and consequences.
- A three part question was presented in a question to students and they were asked to critically analyze each component. If they addressed all three questions fully, they "met" the criteria. If only one or two they failed.
- Either the student did or did not perceive the use of rhetoric.

- For Essay 1, students had to analyze the argumentative or rhetorical strategies of a persuasive text and explain why those strategies matter in Essay 1 Prep and Essay Pass/Fail assignments. Since identifying argumentative and rhetorical strategies and making and supporting a claim about those strategies involves critical thinking (recognizing logical thinking, obstacles to it, and identifying and evaluating these in others' work), students whose Essay 1 assignments made and supported a claim targeting the argumentative or rhetorical strategies used in the primary text demonstrated critical thinking, while those whose Essay 1 assignments made and supported a claim about the topic of the primary text instead, did not yet demonstrate critical thinking.
- Did they complete each task in a way that shows me they have used their own thought process and have those tasks come together to create a final positive outcome that meets the guidelines for the Op-Ad.

ENGLISH Course Changes

4 out of 20 sections will be making changes to their curriculum based on the assessment data.

- This semester, I used it before the argument essay to explain how to make an effective argument. However, this exercise would have worked better when I was first introducing the rhetorical appeals of logos, pathos, and ethos. Ethos is typically hard for my students to understand, and this exercise would help define it for them. In the future, I will move this exercise to earlier in the semester.
- I'll spend an entire class period discussing the nature of critical questioning.
- I will spend more time discussing examples of the kind of critical thinking that transcends mere close reading and description. I may also change the assignment altogether and ask them to read and critique a plain, didactic essay.
- One issue that needs to be addressed is whether to count basic punctuation and spelling as part of the assessment. I have students who demonstrate critical thinking, but are unable to articulate their thinking in writing. This is where tutoring 1:1 tutoring can really make a difference to those who take the opportunity.

ENGLISH Critical Thinking Definitions

Developing and strengthening students' BS detectors by building their rhetorical toolkits with a range of persuasive techniques used across different media.

The students will analyze two arguments to determine which argument was stronger. The students will assess their reasoning as to why one of the arguments was stronger than the other.

Rational inquiry, questioning the source of facts presented, reversing assumptions, and asking critical questions. This last is the most important and is defined as: looking for a weakness in an argument that can be described as, "If this part is true, and another following part is true, then how can the conclusion be correct?"

As for what I consider critical thinking, beyond the approaches I modeled this semester, the concept is ever evolving for me as a thinker/educator. To question assumptions of others and, especially, ourselves is key. Be active: understand rhetorical strategies (to benefit a community, possibly manipulate, and so forth), explore preconceived views (how and why they were formed and, possibly, maintained), and give room for a multiplicity of ideas expressed in our changing world.

Critical thinking is recognizing what sound and logical thinking and reasoning look like as opposed to what distorted thinking looks like, and what the obstacles (for example, confirmation bias) to sound and logical thinking and reasoning look like. Also, it is the avoidance of those obstacles when making decisions and sharing ideas. And, it is being able to identify and evaluate these things in our own and others' work. Critical thinking is also questioning in order to discover "what is" as opposed to "what appears to be." So, for this critical thinking assignment, questioning to identify why someone uses this particular tool, in this particular situation to get this particular response is using critical thinking to analyze and evaluate and understand manipulation and influence in communication. We are also using critical thinking to discover how and when the way something is said plays on other's biases and distorted thinking, and how this affects the ongoing conversation on an issue.

I handed out the critical thinking models provided by liberal studies and asked students to adopt a model that made the most sense to them. We went over all of the models in class and compared and contrasted them. I stress that critical thinking is a process and that it requires higher level skills like analysis, synthesis, and evaluation. I like asking "How do you know that?"

The objective analysis of an issue; deconstructing an issue without bias.

As for what I consider critical thinking, beyond the approaches I modeled this semester, the concept is ever evolving for me as a thinker/educator. To question assumptions of others and, especially, ourselves is key. Be active: understand rhetorical strategies (to benefit a community, possibly manipulate, and so forth), explore preconceived views (how and why they were formed and, possibly, maintained), and give room for a multiplicity of ideas expressed in our changing world.

The ability to perceive the rhetorical tools of persuasion (logos, ethos, pathos) used by a writer or speaker.

"While there are various definitions of critical thinking, a constituent set of intellectual skills would appear to involve all or some of the following: identifying central issues or assumptions in an argument, making correct inferences from data, deducing conclusions from information or data provided, interpreting whether conclusions are warranted on the basis of data given, and evaluating the validity of an argument" (Pascarella et al. 5). I evaluated whether critical thinking was demonstrated by assessing the student's evidence that s/he examined the chosen issue by asking a valid, arguable research question; engaging in critical questioning of assumptions and reasoning related to the topic; answering the research question based on a variety of academic evidence; creating a logical argument based on a variety of academic evidence; critical evaluation of research sources; and drawing reasonable conclusions based on the evidence. Pascarella, Ernest T., et al. "Is differential exposure to college linked to the development of critical thinking?" *Research in Higher Education* 37.2 (1996): 159-174.

Rational inquiry, questioning the source of facts presented, reversing assumptions, and asking critical questions. This last is the most important and is defined as: looking for a weakness in an argument that can be described as, "If this part is true, and another following part is true, then how can the conclusion be correct?"

Critical thinking is that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them. (from Criticalthinking.org)

The ability to challenge conventional wisdom about each and every issue assigned.

The ability to perceive the rhetorical tools of persuasion (logos, ethos, pathos) used by a writer or speaker.

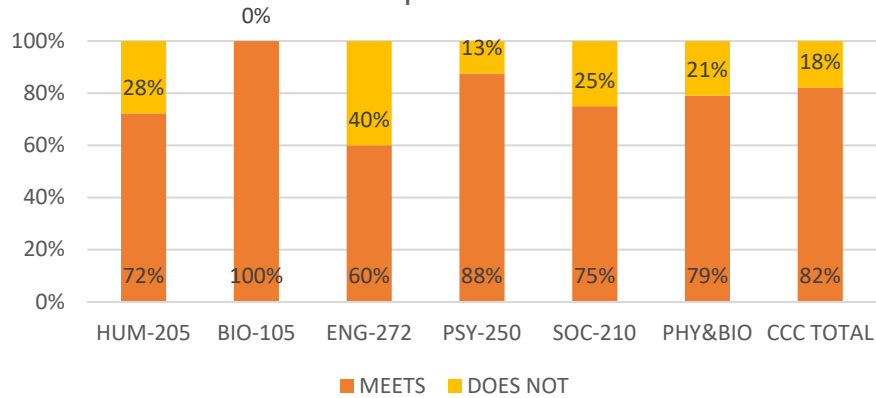
Critical thinking is careful thinking, done through reflection and making use of proper criteria. Using critical thinking in assignments would be using the brain and not Google to find the answers and/or results.

FALL 2016 GENERAL EDUCATION CRITICAL THINKING

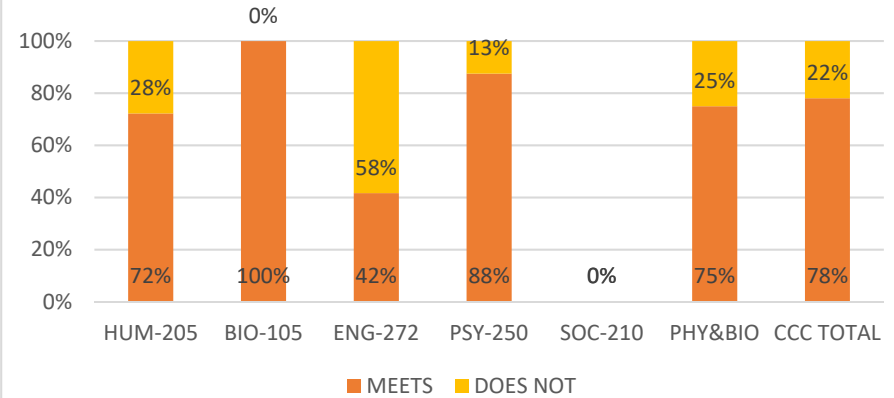
Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

WRITING INTENSIVE

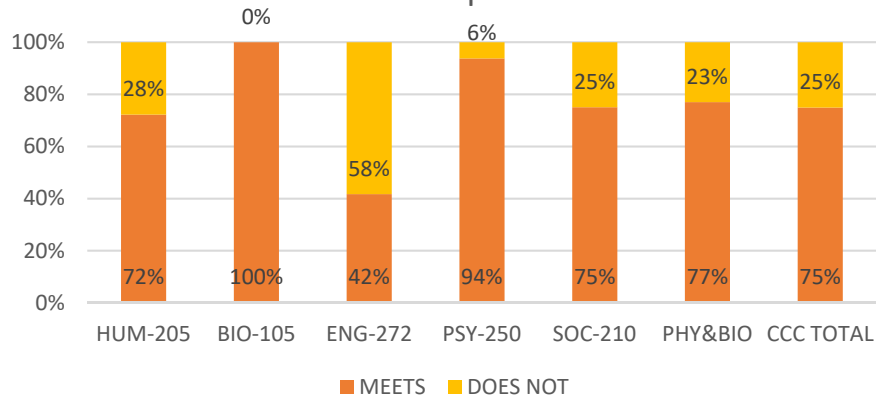
Formulate vital questions and problems in a clear and precise manner.



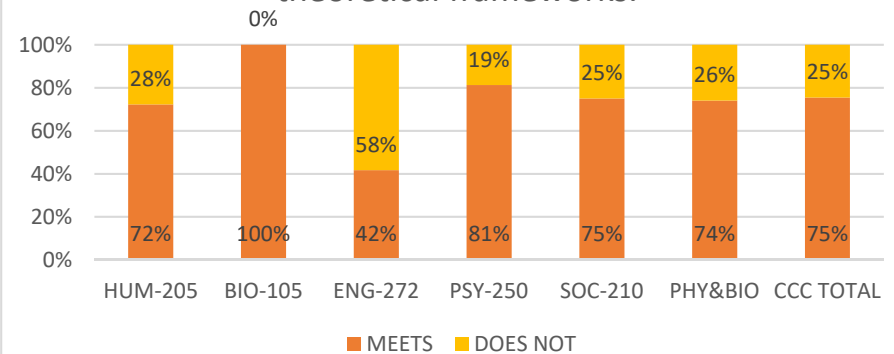
Gather, assess, and interpret information within a theoretical framework.



Develop well-reasoned conclusions and solutions to problems.



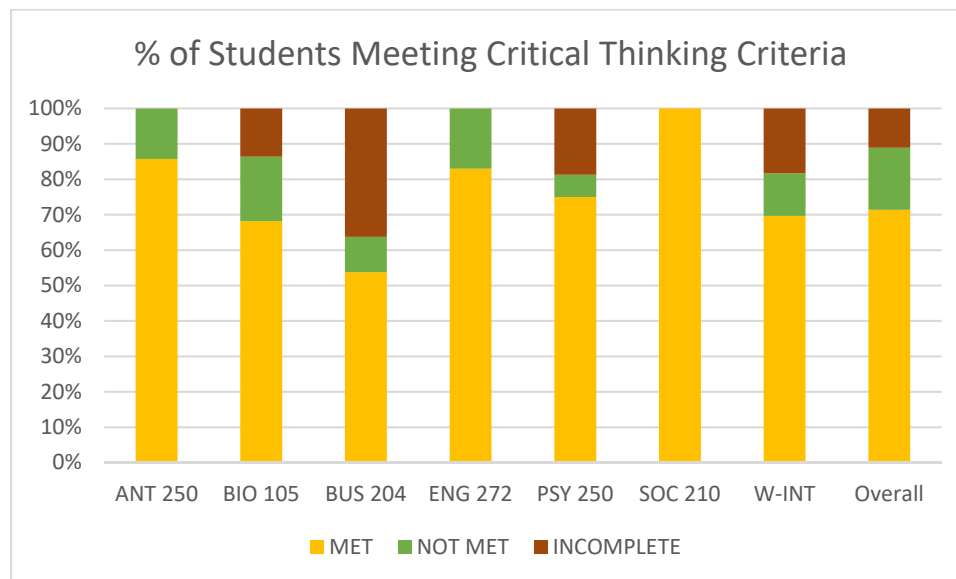
Recognize and assess the assumptions, implications, and consequences of different theoretical frameworks.



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Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

WRITING INTENSIVE



COURSE	MET	NOT MET	INCOMPLETE	N =
ANT 250	86%	14%	0%	1
BIO 105	68%	18%	14%	1
BUS 204	54%	10%	36%	3
ENG 272	83%	17%	0%	2
PSY 250	75%	6%	19%	1
SOC 210	100%	0%	0%	1
W-INT	70%	12%	18%	9
Overall	71%	18%	11%	115

WRITING INTENSIVE Assessment Criteria

ANT 250

- Whether or not they stuck with the "easy" answer or whether they could defend a perspective that they don't necessarily agree with. Seeing beneath the surface.

BIO 105

- Students who received the "Meets" designation for critical thinking obtained a score of greater than or equal to 70% in part III of the attached rubric.

BUS 204

- Whether the student actually was able to consider a job opening impartially and without their own selective bias. Did they just state what they think of themselves as job candidates or did they actually attempt to see from another's perspective what was desirable in a job candidate.
- Point system using a Rubric

ENG 272

- Critical Thinking Rubric 2-Tier
- I set up the criteria of my own grading rubric so that an A or B would meet all of the critical thinking rubric criteria, that a C would meet 1 or 2 of the criteria, and that a D or F would meet none of the criteria.

HUM 205

- See definition

POS 233

- See definition

PSY 250

- Did students acknowledge that the issue is multi-faceted, investigate the issue from numerous perspectives, ensure ideas are supported by evidence, avoid confirmation bias, avoid sweeping statements, and present ideas in an objective manner?

SOC 210

- It was a writing intensive class. They were asked to write each gender problem exploring each different lens.

WRITING INTENSIVE Course Changes

4 out of 9 sections will be making curriculum changes due to the assessment results.

- I will reflect upon the process for researching and writing the research paper to see how I can help promote critical thinking in the class. Currently, I do not have specific changes in mind, but I am open to making changes upon reflection.
- I will update debate options in the future to ensure they remain topical. Otherwise, the format will remain the same.
- Clearer instructions.
- I will not change the class itself but rather the process of preparation to ensure that accurate reading of the materials and an understanding of the definitions we're using is understood.

WRITING INTENSIVE Critical Thinking Definitions

Challenging ourselves to see the world from a perspective other than the one we were raised with or our own culture. Questioning what is "truth" and attempting to see other versions of it.

Critical thinking is the process of reflecting on and improving one's effort to analyze information in an objective and thorough manner and emphasizes consideration of the accuracy, credibility, relevance and logic of arguments and data.

To fully identify and analyze possible choices from multiple perspectives in order to make the best judgment in decision-making processes.

The ability to interpret information from the text and other sources and create communication that will apply these concepts correctly to actual business situations.

Critical thinking is that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them. (Criticalthinking.org)

Using revision and reflection to determine students' writing processes, to analyze their strengths and weaknesses as writers, and to create a plan for improving their writing

The ability to make a logical argument supported by evidence and aware of the relevant evidence.

For this class, it is the ability of an individual to make a logical argument supported by evidence and conscious of the evidence.

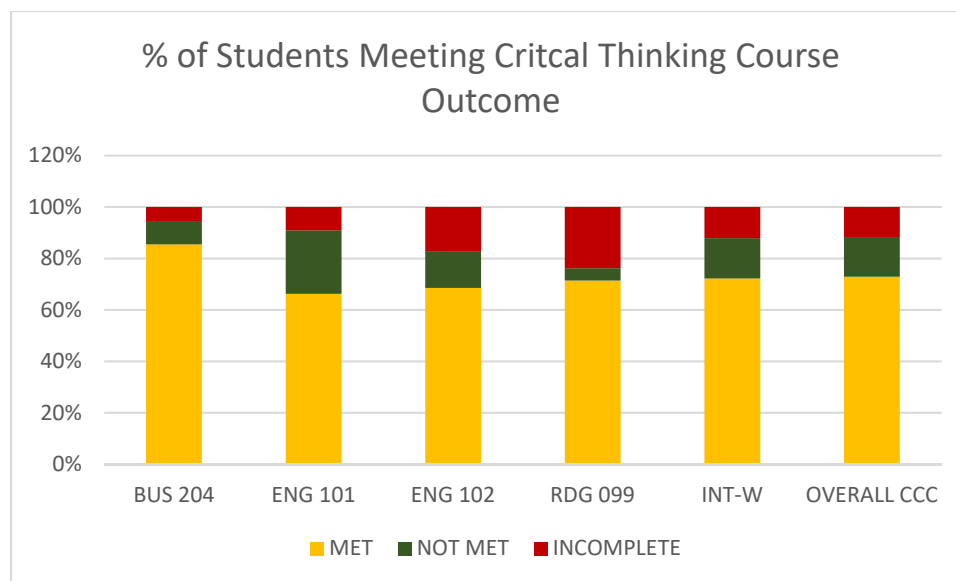
Using peer-reviewed sources, research a societal issue, and then apply social psychology principles to improve that issue. Critical thinking includes acknowledging that the issue is multi-faceted, investigating the issue from numerous perspectives, ensuring ideas are supported by evidence, avoiding confirmation bias, avoiding sweeping statements, and presenting ideas in an objective manner.

Critical thinking in this context means to explore the world of gender in the United States using the sociological imagination and valid/reliable sources. Students are asked to apply: social location, time and geography, access to resources, race/class/ gender (intersectionality) and other lens in which to analyze gender.

FALL 2017 GENERAL EDUCATION CRITICAL THINKING

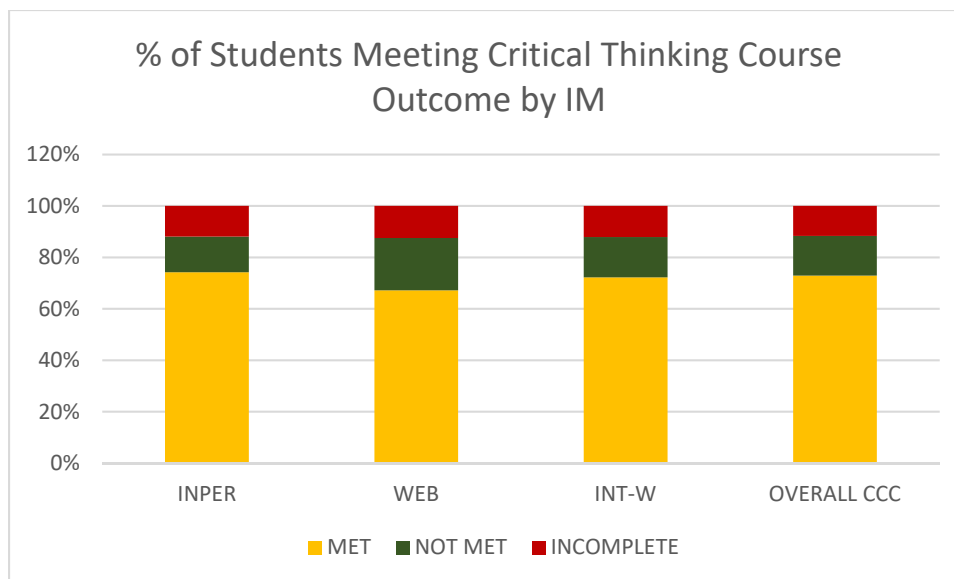
Program-Level Outcome: Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

INTENSIVE WRITING (INT-W) BY COURSE



COURSE	MET	NOT MET	INCOMPLETE	N =
BUS 204	85%	9%	5%	2
ENG 101	66%	25%	9%	4
ENG 102	69%	14%	17%	3
RDG 099	71%	5%	24%	1
INT-W	72%	16%	12%	10
OVERALL CCC	73%	15%	12%	68

INTENSIVE WRITING (INT-W) BY INSTRUCTIONAL METHOD



IM	MET	NOT MET	INCOMPLETE	N =
INPER	74%	14%	12%	7
WEB	67%	20%	13%	3
INT-W	72%	16%	12%	10
OVERALL CCC	73%	15%	12%	68

INTENSIVE WRITING (INT-W) COURSE-LEVEL OUTCOMES MEASURED

BUS 204 Write clearly, concisely, and correctly.

- To provide students with communication skills for the workplace necessary to generate and organize ideas, draft and review various business.
- To identify ways in which the complex process of communication deals with perceptual and other problems.
- Compose and revise business documents
- Write effective memos, business letters, resumes, and reports clearly, concisely, and correctly
- Research, summarize and document information, producing a written report and presentations
- Develop professional speaking and listening skills
- Understand the influence of electronic communication on management and organizational processes
- Recognize communication challenges in a global business environment

ENG 101 1. analyze and evaluate academic and other non-fictional print and electronic texts;

- ENG 101 Analyze and evaluate academic and other non-fictional print and electronic texts.
- ENG 101 compose writing in non-fiction genres, making rhetorical choices appropriate to context, purpose, and audience;

planning, constructing, and presenting logical, coherent, well-supported arguments with consideration of target audience; using appropriate technology for communication and information gathering

This is a difficult question to address, as it is unclear which of the many definitions of "critical thinking" we are utilizing for the purpose of this report. Colleges have struggled to define this concept for a long while. Pascarella et al. offered: While there are various definitions of critical thinking, a constituent set of intellectual skills would appear to involve all or some of the following: identifying central issues or assumptions in an argument, making correct inferences from data, deducing conclusions from information or data provided, interpreting whether conclusions are warranted on the basis of data given, and evaluating the validity of an argument." I would argue that all course outcomes for English 101 are addressed in the attached assignment, and most are related to critical thinking as defined above. However, if it is necessary to choose one course outcome, I will select: 7. research, evaluate, analyze, and document sources; Pascarella, Ernest T., et al. "Is differential exposure to college linked to the development of critical thinking?." Research in Higher Education 37.2 (1996): 159-174.

- ENG 102 * integrate evidence to support their own ideas, using quoting, paraphrasing, and summarizing

- * Analyze, synthesize, and evaluate a variety of print and electronic texts
- * Formulate vital questions and problems in a clear and precise manner
- * Develop well-reasoned conclusions and solutions to problems

Students must score and 89 or higher and must have made use of argumentative and/or critical inquiry of some kind in order to be considered successful for this assessment.

- RDG 099 10. Choose appropriate critical thinking strategies for different types of tests and assignments.

INTENSIVE WRITING (INT-W) COURSE CHANGES

- BUS 204 no actions were taken because the students met the criteria of the assignment well.

The majority of students had few problems with this assignment. Perhaps I will provide a little more specific information on the need to address pros and cons with emails. This may help students identify more reasons some people would find this communication method more comfortable.

ENG 101 I'm not sure what you are looking for here when you say actions taken to adjust student learning for the class. I would say this means what was changed during instruction to help students struggling with this outcome achieve it. For this course then, one thing that was adjusted for was additional one on one instruction. For example, as is usual for a rhetorical analysis assignment, several students have trouble understanding the difference between writing about the issue brought up by a text, and the way the writer of a text uses rhetorical tools to persuade an audience. While working on thesis development for our Rhetorical analysis, I modified the schedule and assignments for a portion of the class period and taught one on one rotating small groups to promote learning of this difficult concept, while students continued with the previously assigned group work assignment for the day.

I am pleased with the results of this class, especially since they were my best-performing composition class. In future iterations of this assignment, I might spend more class time covering how to write more cohesive evaluations of a text after it was analyzed. That seemed to be the skill that many students struggled with, particularly the ones who did not meet the criteria for the assessed course outcome.

In future semesters, I would like to have students bring several sources to class to analyze how the sources are related, how they are interpreting the data and what conclusions they are coming to. This could be done in peer groups so individuals could gain the perspectives of their peers on the sources.

For my next section of this course, I will spend more time discussing and explaining the differences between scholarly and popular sources, and why these differences are important. I also plan to construct additional opportunities for students to discuss these issues in more depth with their peers and to analyze specific sources collaboratively, prior to applying these skills independently. While I have been pleased overall with the student outcomes for this assignment, critical evaluation and utilization of source material is a key component of research skills. Therefore, it is a major focus of my constant revision and improvement of this course.

ENG 102 This semester, I believed I scaffolded the learning opportunities in a way that supports students in meeting this outcome, however, it's clear that I need to be more intentional in my approach when I teach this course next semester. Though I provided feedback to these students in their formative assessments, which indicated how they could improve their outcomes, I'm thinking that I will use a different formative/low stakes assignment to help students hone these skills. I'm going to incorporate even more structure into the reading responses that students compose each week. Specifically, I'm looking to incorporate a regular assignment called a rhetorical precis, which requires students to compose a highly structured paragraph. The following example, which I will use as a model for creating the weekly assignment, is drawn directly from Oregon State University's website (http://oregonstate.edu/instruct/phl201/modules/rhetorical-precis/sample/peirce_sample_precis_click.html):

In a single coherent sentence give the following:

-name of the author, title of the work, date in parenthesis;

-a rhetorically accurate verb (such as "assert," "argue," "deny," "refute," "prove," "disprove," "explain," etc.);

- a that clause containing the major claim (thesis statement) of the work.
- b) In a single coherent sentence give an explanation of how the author develops and supports the major claim (thesis statement).
- c) In a single coherent sentence give a statement of the author's purpose, followed by an "in order" phrase.
- d) In a single coherent sentence give a description of the intended audience and/or the relationship the author establishes with the audience.

I believe that I'll be able to provide even more meaningful focused feedback to students through the rhetorical precis assignment. Furthermore, I think the rhetorical precis is a really great teaching tool to get students to analyze mentor texts while producing their own strong paragraphs that are well-developed and well-supported with evidence. In addition to using the rhetorical precis, I plan to be more intentional about how I teach students when to quote, paraphrase, or summarize. Most often, it seems that students default to using direct quotes when summarizing or paraphrasing would better serve their argument. Through the rhetorical precis, I can provide feedback which will help students be more agile in how they integrate evidence into their own writing.

This assignment was used as part of a larger assignment. The idea was to permit students opportunities to create concepts for games to solicit social awareness with the persuasive appeals in mind. The second part of the assignment was to analyze the appeals for effectiveness in a rhetorical analysis. Based on student feedback and nearly 100% critical thinking outcome success in the class, I will use this assignment again.

I use words such as logic, analysis, assertions, proof, insight, and critical questioning. Every semester most students find that this is something they understand right away or after some discussion. However, every semester there are a few who write something that is only an informational recitation or a winding summary. Each semester I have tried to reach out to everyone, especially those who missed the point. My thoughts now center around finding a brilliant but accessible example of critical thinking and analysis in writing and having the class read it and explain why it is useful in understanding our task.

RDG 099 No action was necessary as most students who turned in the assignment demonstrated the ability to analyze, evaluate, and synthesize their thoughts regarding what they learned in the course.

Fall 2016-Fall 2017 Course Assessment Reports

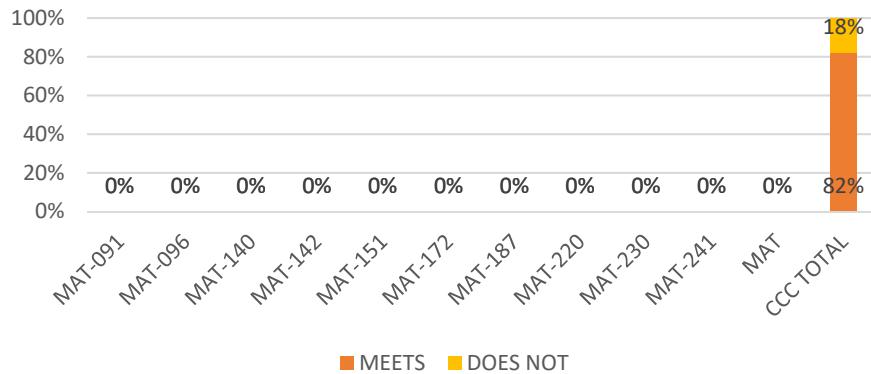
Mathematics

FALL 2016 GENERAL EDUCATION CRITICAL THINKING

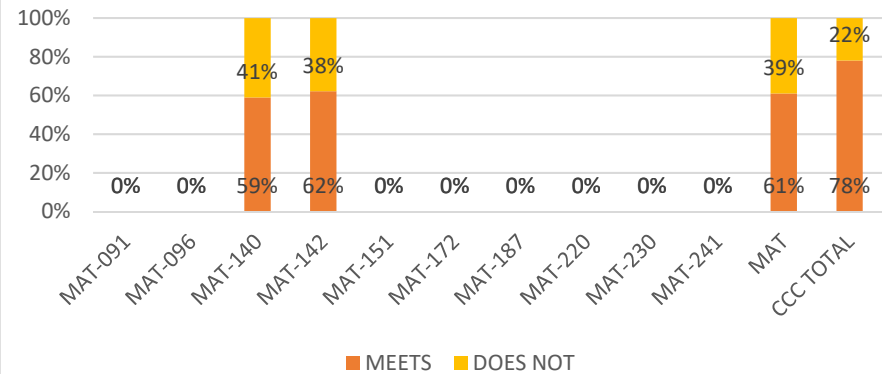
Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

MATHEMATICS

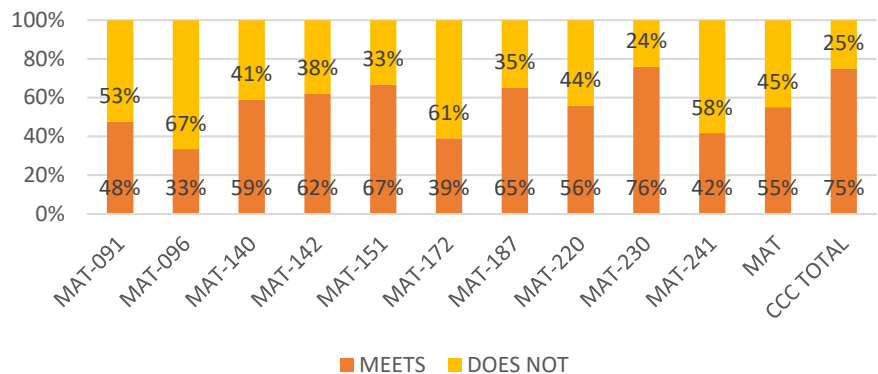
Formulate vital questions and problems in a clear and precise manner.



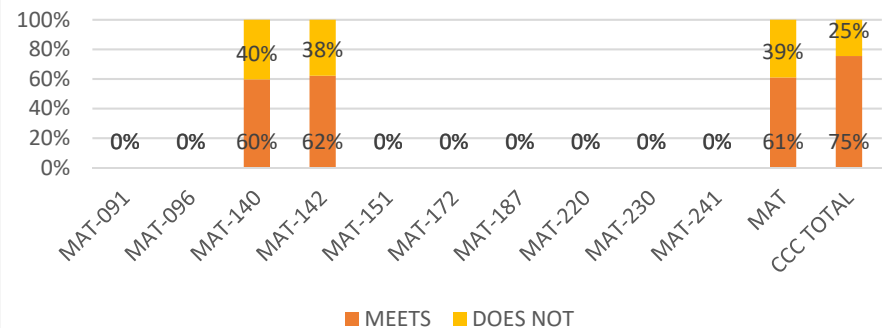
Gather, assess, and interpret information within a theoretical framework.



Develop well-reasoned conclusions and solutions to problems.



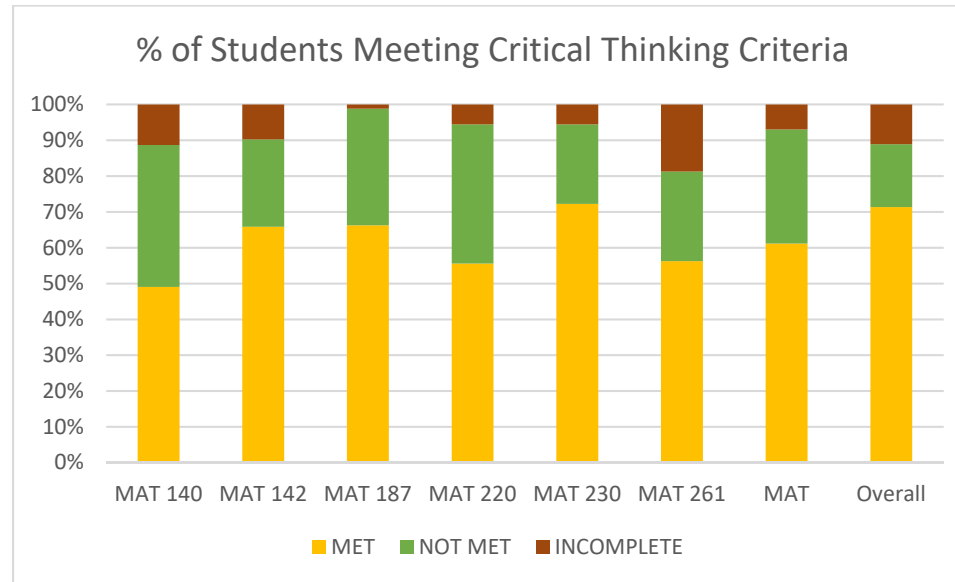
Recognize and assess the assumptions, implications, and consequences of different theoretical frameworks.



SPRING 2017 GENERAL EDUCATION CRITICAL THINKING

Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

MATHEMATICS



COURSE	MET	NOT MET	INCOMPLETE	N =
MAT 140	49%	40%	11%	4
MAT 142	66%	24%	10%	3
MAT 187	66%	33%	1%	2
MAT 220	56%	39%	6%	1
MAT 230	72%	22%	6%	1
MAT 261	56%	25%	19%	1
MAT	61%	32%	7%	12
Overall	71%	18%	11%	115

MATHEMATICS Assessment Criteria

**No definitions included from data entered in Canvas.*

MAT 140

- Five common final exam questions submitted by the math department.
- At least 60% score on the common assessment questions.
- A rubric was used to give students points based on whether they used the correct formulas, found the correct answer, and had good explanations of how they got their answer.

MAT 142

- Five common final exam questions submitted by the math department.
- In the math department we have the students participate in graded group work projects in class and we have critical thinking problems on the final with a common rubric to measure whether the students "meet" or "do not meet" the criteria.

MAT 187

- The assessment used was common to all sections of MAT 187

MAT 220

- Two Final Exam questions.

MAT 230

- Grade of 70% or higher on the Final Exam.

MAT 261

- Meets: A score of 15 or higher on the common final assessment Does not meet: A score of 14 or less

MATHEMATICS Course Changes

7 out of 12 sections will be making changes to their curriculum based on the assessment data.

- I will work on some of the topics that the students did not do as well on next semester, such as understanding the differences between mean and median and why a mean would be much lower than a median.
- I need to have them working together in class more, to be able to more accurately assess their progress towards the class goals. More formative assessment will help them be more successful on the final assessment.
- I will change the assessment for question #5 as the results are not very interesting. The performance on Question #2 was very poor for such an easy question. Next time I teach the class I will: 1) provide more examples (and include section 7.3 on describing switching forcing functions) 2) put more than one Laplace transform question on their tests
- The second final exam question was not necessarily the best indication if my students understand the main ideas in Calculus I. I would like to look into creating a project based assessment for next year.
- I need to tell the students continuously that they are learning critically thinking skills. Also, there is a problem on the common assessment that needs to be updated to match the format taught in the course.

MATHEMATICS Critical Thinking Definitions

Analysis of a problem in order to come to a conclusion.

Students can solve various math problems utilizing problem solving skills.

In my class, critical thinking means to analyze and evaluate a math problem and reflect on how it pertains to real-world situations.

Critical thinking in college math means the students can use the skills and problem solving strategies they develop in the class to generate solutions to problems they encounter outside of class, in the "real world".

Formulating a response to a stimulus or directive, then evaluating that response for completeness, correctness, and efficacy in the physical and/or societal milieu in which it resides, then reflecting upon that evaluation and editing the response.

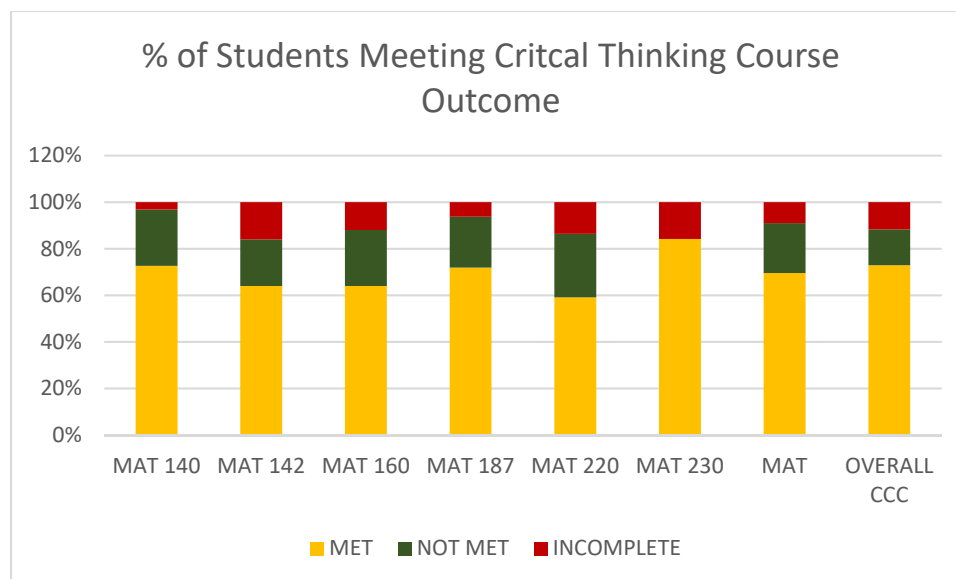
A student being able to reason through a mathematical problem and determine the best method for solving.

Choosing a strategy based on the form of a problem, applying the strategy, and evaluating/using the results

FALL 2017 GENERAL EDUCATION CRITICAL THINKING

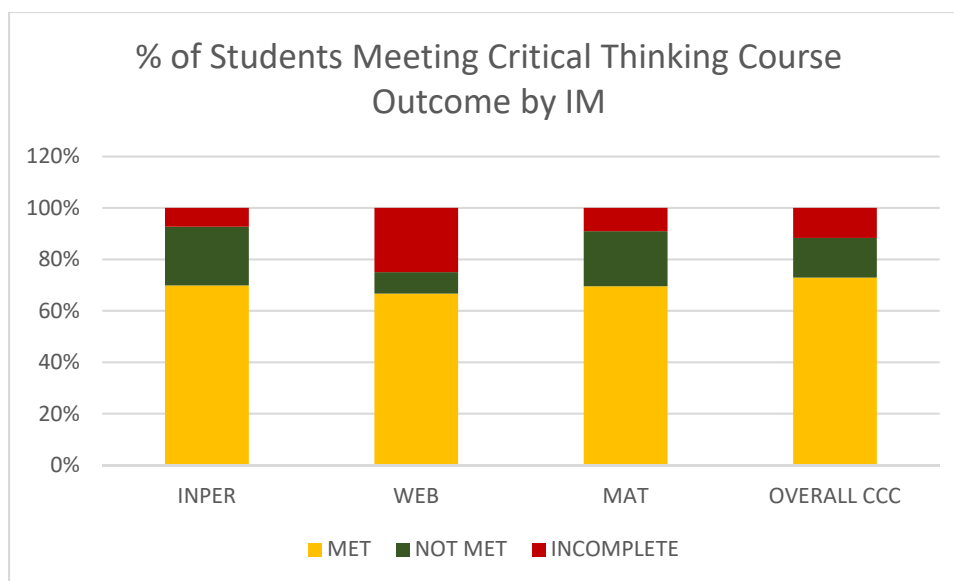
Program-Level Outcome: Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

MATHEMATICS (MAT) BY COURSE



COURSE	MET	NOT MET	INCOMPLETE	N =
MAT 140	73%	24%	3%	4
MAT 142	64%	20%	16%	2
MAT 160	64%	24%	12%	1
MAT 187	72%	22%	6%	3
MAT 220	59%	27%	14%	1
MAT 230	84%	0%	16%	1
MAT	70%	21%	9%	12
OVERALL CCC	73%	15%	12%	68

MATHEMATICS (MAT) BY INSTRUCTIONAL METHOD



IM	MET	NOT MET	INCOMPLETE	N =
INPER	70%	23%	7%	11
WEB	67%	8%	25%	1
MAT	70%	21%	9%	12
OVERALL CCC	73%	15%	12%	68

MATHEMATICS (MAT) COURSE-LEVEL OUTCOMES MEASURED

MAT 140 Gather, assess, and interpret information within a theoretical framework
 Develop well-reasoned conclusions and solutions to problems
 Recognize and assess the assumptions, implications, and consequences of different theoretical frameworks

MAT 140 Gather, assess, and interpret information within a theoretical framework
 Develop well-reasoned conclusions and solutions to problems
 Recognize and assess the assumptions, implications, and consequences of different theoretical frameworks

MAT 140 The critical thinking tool given to me from the math department specified numbered "course" outcomes related to the MAT 140 course actual outcomes. The numbered outcomes were similar to the actual outcomes of MAT 140. The course outcomes that were specified on the assessment tool (underlined) had differences in the wording of the actual outcomes defined for the course (parentheses).

Course Outcome 3: Solve various types of growth problems (Missing "including exponential")

Course Outcome 1: Solve applied financial problems (Reworded from “calculate annuities and loan schedules”)

Course Outcome 6: Create and interpret statistical graphs (Reworded from “use normal distributions to describe data sets and calculate probabilities”)

Course Outcome 4: Utilize probability theory to solve applied probability problems (Reworded from “solve various application problems”)

Course Outcome 7: Calculate and interpret numerical descriptive statistics (Reworded from “calculate descriptive statistics”)

- MAT 140 Problem 1:
Course Outcome 3: Solve various types of growth problems
Performance Measure 1: Apply mathematics in context using appropriate problem solving skills
- Problem 2:
Course Outcome 1: Solve applied financial problems
Performance Measure 2: Choose and manipulate formulas
- Problem 3:
Course Outcome 6: Create and interpret statistical graphs
Performance Measure 3: Create and interpret graphical representation
- Problem 4:
Course Outcome 4: Utilize probability theory to solve applied probability problems
Performance Measure 7: Gain appreciation of the nature and uses of mathematics
- Problem 5:
Course Outcome 7: Calculate and interpret numerical descriptive statistics
Performance Measure 8: Communicate using the language of mathematics
- MAT 142 Course Learning Outcome :
1.solve applied financial problems;
2.understand the differences between linear, exponential, and logistic growth;
3.solve various types of growth problems;
4.utilize probability theory to solve applied probability problems;
5.understand the basic elements of the normal distribution;
6.create and interpret statistical graphs;
7.calculate and interpret numerical descriptive statistics;
- MAT 142 Problem 1:
Course Outcome 3: Solve various types of growth problems
Performance Measure 1: Apply mathematics in context using appropriate problem solving skills

Problem 2:

Course Outcome 1: Solve applied financial problems

Performance Measure 2: Choose and manipulate formulas

Problem 3:

Course Outcome 6: Create and interpret statistical graphs

Performance Measure 3: Create and interpret graphical representation

Problem 4:

Course Outcome 4: Utilize probability theory to solve applied probability problems

Performance Measure 7: Gain appreciation of the nature and uses of mathematics

Problem 5:

Course Outcome 7: Calculate and interpret numerical descriptive statistics

Performance Measure 8: Communicate using the language of mathematics

MAT 160 1. use statistical methods to collect, organize, analyze and interpret numerical data;
2. create and interpret graphs of data;
7. estimate population parameters;
9. interpret confidence intervals;
10. test hypotheses

MAT 187 Utilize logarithmic and exponential properties to solve related equations.

MAT 187 Graph equations and functions using various methods including technology.

Solve linear, quadratic, rational, absolute value, polynomial, and radical equations.

Utilize logarithmic and exponential properties to solve related equations.

Solve right and oblique triangles.

Work with vectors and vector quantities.

Solve application situations related to methods presented in this course.

MAT 187 Utilize logarithmic and exponential properties to solve related equations.

Solve application situations related to methods presented in this course.

MAT 220 Problem 1:

Course Outcomes 3: Analyze and evaluate limits.

Performance Measure 6: Apply and interpret limits and limit definitions

Problem 2:

Course Outcome 8: Analyze and interpret the concept of continuity of functions.

Performance Measures 3: Create and interpret graphical representation

8: Communicate using the language of mathematics

MAT 230 Identify differential equations and their solutions graphically, numerically and analytically.

MATHEMATICS (MAT) COURSE CHANGES

MAT 140 Students were struggling more with probability and some other later materials, so more discussion was encouraged for those sections to help clarify any misconceptions students had. More examples than what I have done previously were also given to help reinforce the methods for solving such problems.

MAT 140 Having only taught this course once, I would like to ensure that students have a deeper understanding of the content and do more cooperative and formative assessment.

MAT 140 I was blown away by the specific requirement that students would need to state some specifics about comparing the mean and the median by assessment item 5. It felt like an all or nothing approach to grading when it was specified

"If they did not mention that the mean is affected by extreme values while the median is not, then no points."

This specific statement literally instructed me to subtract an average of 13% from my class average scores. I believe the assessment item could be better defined so that students would be more likely to provide the desired response. At the same time, criteria was weighed so much more strongly than other criteria, that I felt it necessary to add it to my curriculum as a specifically memorized concept. I wish it was stressed in the course outline I was given for the course.

I realized after using the tool to measure my students, that the need for a pre-assessment would be wise that would prepare my students for what is expected of them. The tool, interestingly, corresponded with student final performance in the class in one direction. Students who were designated with "PASS" with the critical thinking tool also performed higher than 60% in the course. There were students who performed higher than 60% in the course but did not receive the critical thinking designation "PASS."

I reflected further during my assessment of the student's performances and drew the following conclusions:

1.) My students will be expected to write more responses out in complete sentences throughout the course.

2.) My students will be given specific vocabulary lists in some activities by which they are expected to utilize terminology for complete credit.

3.) My students will be given more compare and contrast items for practice in the course.

4.) My students are in need of greater enrichment while they participate in collaborative discussions and activities.

4a.) My students could use some improved rubrics while they collaborate so they can better hold themselves accountable for practicing and improving arguments.

4b.) My students can have more elaborate feedback in the form of expectations printed out ahead of class activities.

5.) My students can have more specific assignments assigned at the beginning of the course that will allow for student preparations as they dedicate their time to the course early on.

MAT 140 I am going to continue to incorporate more active learning into the class.

MAT 142 Write a two-three sentence analysis of the assessment results.

16 students meet the 60 % threshold and 8 students did not. Two students did not take the final.

Out of the 24 students who did not meet the criteria, all but two will receive Cs in the class.

List any actions taken to adjust student learning for the section, possible changes to a future section if taught again, or explain why no action was necessary.

I will place more emphasis on formula calculation and calculator use to improve the student's scores.

MAT 142 I will continue to incorporate more active learning into the course.

MAT 160 I will spend more time explaining the concept of types of errors and what a decision from a hypothesis test means.

MAT 187 There was a continuing strong correlation between students passing the class and passing the assessment. The students who make it to the final typically are students who are passing the class. Since this assessment can be used as a tool to look at if the above (desired) pattern is present in all sections of MAT 187 (it is a common assessment), I do not feel any changes to the assessment are necessary. If an instructor has significant dissonance or lack of correlation between students passing the class and passing the assessment, then it could be used by them to adjust their focus.

To really get a feel for the skill students have coming into 187, or how their skills have developed along the way would require a different assessment.

MAT 187 I rewrote my class notes for attempt to improve student learning and confidence. I also revised the practice problems to try to help students grasp the material in smaller increments and gain mastery.

MAT 187 Based on results, increase time spent on application problems.

MAT 220 I will continue to incorporate more active learning into the course.

MAT 230 The results above do not match the overall understanding of Euler's Method the students had. While all the students could eventually successfully complete the activity - getting to see visually and algebraically what Euler's method is - and were able to generate the formula for Euler's method, many students struggled with this concept on the homework and on the exam. There was a disconnect between using critical thinking to discover Euler's method and then being able to apply it.

I am not teaching this class again in the spring, but if I was I would follow the IBL activity with practice on Euler's Method

Fall 2016-Fall 2017 Course Assessment Reports

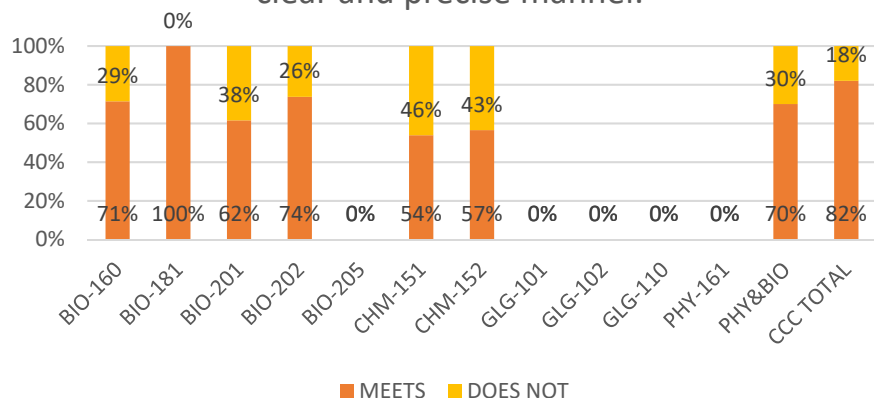
Physical & Biological Sciences

FALL 2016 GENERAL EDUCATION CRITICAL THINKING

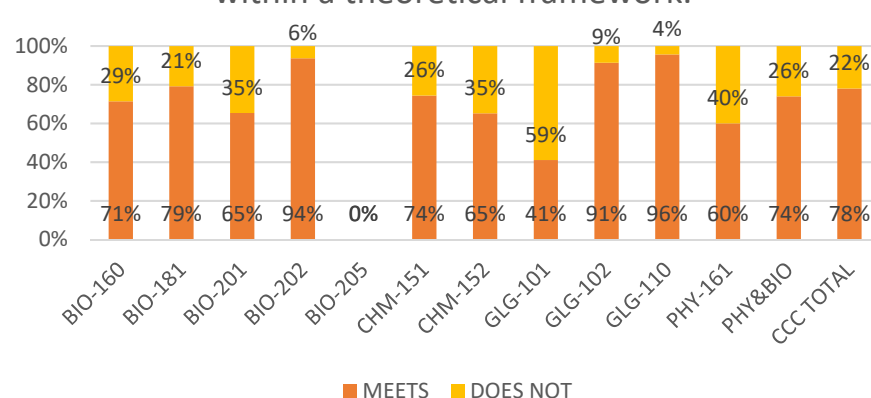
Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

PHYSICAL & BIOLOGICAL SCIENCES

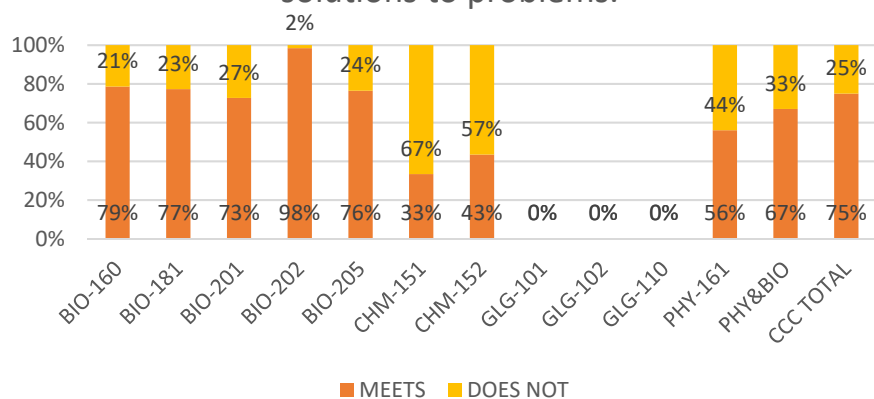
Formulate vital questions and problems in a clear and precise manner.



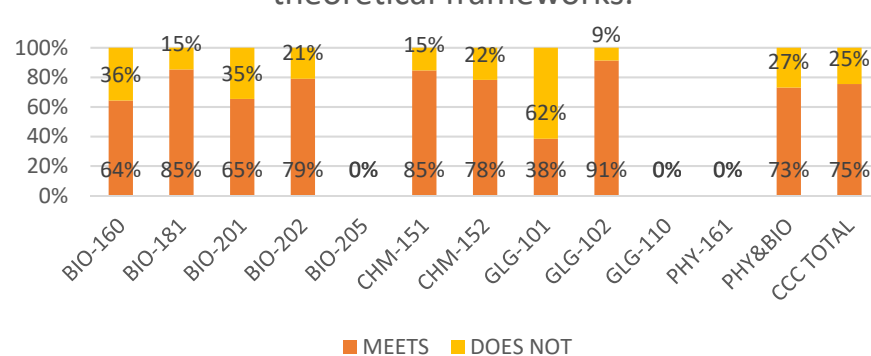
Gather, assess, and interpret information within a theoretical framework.



Develop well-reasoned conclusions and solutions to problems.



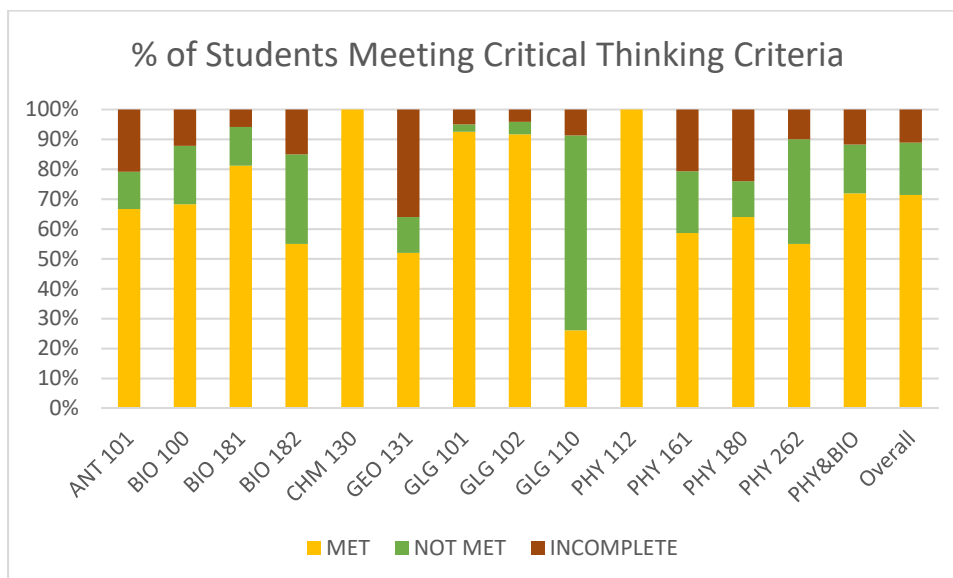
Recognize and assess the assumptions, implications, and consequences of different theoretical frameworks.



SPRING 2017 GENERAL EDUCATION CRITICAL THINKING

Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

PHYSICAL & BIOLOGICAL SCIENCES



COURSE	MET	NOT MET	INCOMPLETE	N =
ANT 101	67%	13%	21%	1
BIO 100	68%	20%	12%	2
BIO 181	81%	13%	6%	4
BIO 182	55%	30%	15%	1
CHM 130	100%	0%	0%	1
GEO 131	52%	12%	36%	2
GLG 101	93%	3%	5%	2
GLG 102	92%	4%	4%	1
GLG 110	26%	65%	9%	1
PHY 112	100%	0%	0%	1
PHY 161	59%	21%	21%	1
PHY 180	64%	12%	24%	1
PHY 262	55%	35%	10%	1
PHY&BIO	72%	16%	12%	19
Overall	71%	18%	11%	115

PHYSICAL & BIOLOGICAL SCIENCES Assessment Criteria

ANT 101

- The student needed to be able to pick out and explain the hypothesis, research methods, and theoretical perspective from a current physical anthropology article. There were 3 levels (Very Good, Good, Fair) that were considered as "meeting" the goal, while a rating of "Poor" did not meet the goal.

BIO 100

- a score of 11 or better out of 15 on GMO persuasive essay at the end of the drying gels and analysis of electrophoresis - highlighted in green in the attached
- Engagement in a mock debate regarding the safety of GMOs.

BIO 181

- A score of 70% or higher on the critical thinking writing assignment was the criteria used for determining whether or not a student met the critical thinking requirement.
- Students who received the "Meets" designation for critical thinking obtained a score of greater than or equal to 70% in the attached rubric.
- Use of a scientific question and hypothesis of their own.; 2. Ability to use bibliographic information to answer their question and test their hypothesis.; 3. Quality of the information chosen as source of evidence for their research. 4. How students presented the steps taken to answer their questions.

BIO 182

- a score of 7 out of 10 or better on question no. 10 at the end of their Animal Portfolio - highlighted in green in the attached

CHM 130

- Successful completion of laboratory assignments. Completion and submission of assigned online material in a timely fashion. Completion of in class assignments. Class participation. In class and online exams including a comprehensive final.

CHM 151/152

- A test has been created with various types of questions comprising of numerical problems, short answer type of questions, questions seeking justification and rational choices etc. Students who got A (equal or above 90%), B (80-89.9%), C (70- 79.9%), D (60- 69.9%), are considered that ...meets or exceeds 4,3,2,1 attributes of critical thinking rubrics respectively. Student with a F grade was considered that he/she didn't meet any criteria of the rubrics. Whether a student "exceeds" or just "meets" in case of a specific criteria are based on the instructor's personal impression about an individual student.

GEO 131

- Identify and analyze the features and conditions of glacial geomorphology in order to construct a model for determining if there is world-wide glacial mass loss.
- Proposal Project, 3 pages in length, double spaced. Format headings required with supporting dialog for each section.

GLG 101

- After several weeks of identifying minerals and rocks, the students were given some wrap up questions at the end of a lab. These were designed to have them justify their answers by explaining which possibilities didn't

work and thereby arriving at the best possible answer. Students who lost more than 2 points on this section of the lab "Do Not Meet" the criteria.

GLG 102

- We focused on geologists' models for the early Earth. There are no rocks (or at least no un-metamorphosed rocks) that have survived from this time. Students were given a tray with 6 rocks and asked to pick which would most likely have been the one that composed the crust for 4 scenarios. They were also required to explain their choice and also explain why the other samples weren't the correct choices. Students who did not explain how they arrived at their answer did not apply critical thinking correctly = Did Not Meet.

GLG 110

- This was an extra credit assignment. 25 points for the video critique and questions, an additional 10 points for evaluating the rebuttal (blog post). Students who turned in the assignment and earned over 20 points "Meet", students who attended class that day, but did not complete the assignment "Did Not Meet".

PHY 112

- The criteria used was the student's response to lab questions, specifically the analysis of the lab graphs (voltage vs current for the resistors and for the light bulb) from the experiment 'Ohm's Law.'

PHY 161

- Based on what they learned in class about density as a fundamental property of most materials, they measured densities of different unknown sample materials and then inferred which materials were present.

PHY 180

- In class assignments

PHY 262

- 50% or higher on the final : Meets Otherwise: Does Not Meet

PHYSICAL & BIOLOGICAL SCIENCES Course Changes

- For MHC-II antigens, the question and topic will need to be re-evaluated as to whether or not it is a critical topic.
- The hemoglobin affinity lecture needs to be redesigned to focus more on cellular function in the respiratory system.
- There are more questions in regards to bone tissues hormones and muscle metabolism that will need to be evaluated by the instructors.
- We have observed that student in CHM151-02 (CRN-13383) class which is a hybrid class, has the fewer student that meets/exceeds critical thinking criteria compare to the in-person class. We have decided to convert this class to an in-person class. I am also creating a specific math module for chemistry student since many students' struggles in my class due to lack of math skill.
- I will assign a question to be evaluated with that approach as a formative activity - a quiz, give feedback on that, in anticipation that that will better prepare students to perform on the cumulative assessment.
- I always make changes each semester to update online material, improve experiments, and ensure the topics being discussed are appropriately relevant to the students' future success.
- I will assign a question to be evaluated with that approach as a formative activity - a quiz, give feedback on that, in anticipation that that will better prepare students to perform on the cumulative assessment.

- I created this extra credit assignment to meet the Critical Thinking assessment instead of "shoehorning" an existing assignment into an assessment artifact. Students are always asking for an extra credit assignment. I never thought so few would complete it. Next time I'll design one of the labs to meet this assessment requirement...

PHYSICAL & BIOLOGICAL SCIENCES Critical Thinking Definitions

In Anthropology, critical thinking means that the student has enough of an understanding of the topic that they can deconstruct it, reflect upon it, and apply it to new situations.

the demonstrated ability to evaluate a source of information or answer a question based on analysis using the 5 bullets listed under critical thinking approach no. 4 "good habits"

Evaluating explanations and evidence for credibility, plausibility, and accuracy.

The ability to use and cite reliable information in the formation of an opinion or argument.

Critical thinking is the process of reflecting on and improving one's effort to analyze information in an objective and thorough manner and emphasizes consideration of the accuracy, credibility, relevance and logic of arguments and data.

Critical thinking is the process in which students develop the ability to reflect on information and conduct an analytical review of the evidence at hand. It means that students will conduct a logic examination of data or bibliographic information and use that to answer questions like: What is the issue being studied? Why is it relevant? What is the evidence? How good is the evidence? What correlations can be found in the data? Are the conclusion or explanations at hand solid? Critical thinking should motivate students into the realms of scientific reasoning and ability to generate questions about their surroundings and natural phenomena.

Critical thinking is the process of reflecting on and improving one's effort to analyze information in an objective and thorough manner and emphasizes consideration of the accuracy, credibility, relevance and logic of arguments and data.

Analyzing, applying, and evaluating information using empirical and non empirical data gathered through class room lecture and laboratory experiments particularly as it applies to the fields of chemistry, biology, and the medicinal sciences.

To be able to recognize and apply information or content that is needed to make decisions, explain concepts, and to understand theory pertaining to a subject of study.

Application of the terminology used in physical geography to resolve a real world issue in the content area.

In this field of study, geologists often arrive at answers by ruling out possibilities. We spent time in class and labs looking at how identification of rocks and minerals is not about making an observation and immediately having an answer. Instead we make a set of observations and use them to rule out possibilities (from 1000's of rock or mineral names to hopefully one). Essentially we focused on the Critical Thinking (Scientific Method) skills of making observations and asking questions: What could it be? What couldn't it be?

We revisited the Scientific Method for this class, particularly the differences between lab sciences (Physics, Chemistry) and field sciences. In Earth Science, the Testing step in the Scientific Method is not running another experiment in the lab. Instead it is often asking if the hypothesis or theory makes sense in a new setting or environment. Essentially asking "Does this make sense?" We also discussed how geologists often arrive at a conclusion by ruling out possibilities until only remains.

In this class, we discussed the importance of asking questions as crucial part of Critical Thinking and the Scientific Method. In class we watched a BBC video presenting scientists who propose that a mega-tsunami could strike the eastern United States. Students were instructed to evaluate the validity of the proposed event and trigger based on material we'd covered in class. They were also instructed to write down any questions they had after watching the video. Outside of class students were instructed to write up a synopsis of the proposed event, the questions they had, and to read a blog post by another scientist disputing the likelihood of the proposed event.

To use logic and prior knowledge to synthesize, evaluate, extrapolate, and predict outcomes in a new situation.

Understanding and applying scientific thinking

Success in mastering scientific thinking

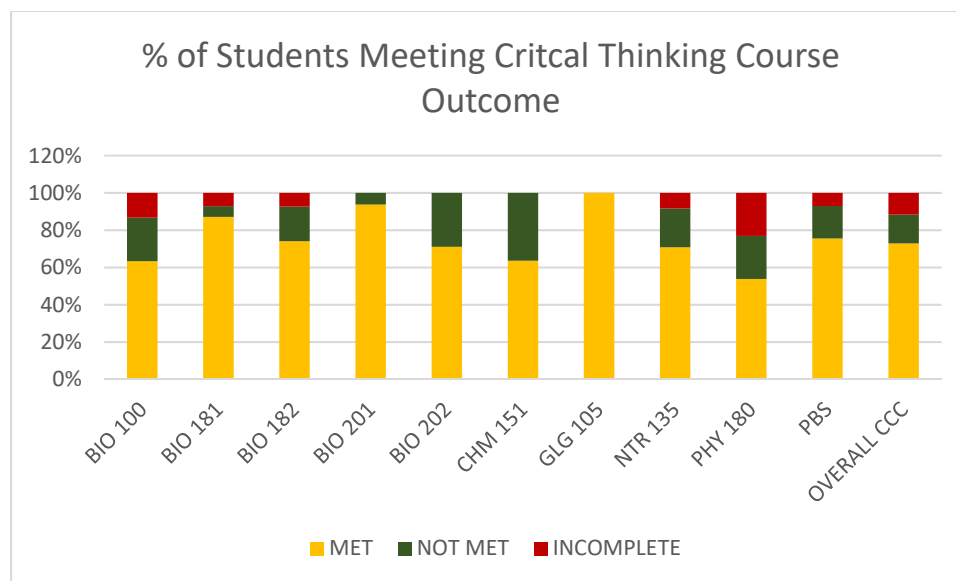
Critical thinking is one or more of the following in this physics course: When confronted with a real or described physical system: 1) describing that system mathematically, particularly in the choice of the relevant expression 2) Deriving missing elements from existing (Solving 1)) 3) Interpreting results from 2) in terms of: a) Real world feasibility b) Matching other theoretical results

Ability to think rationally, visualize a problem, make an action plan to solve the issues, willingness to listen and appreciate competing views, compromise and accepting solution based on ground realities

FALL 2017 GENERAL EDUCATION CRITICAL THINKING

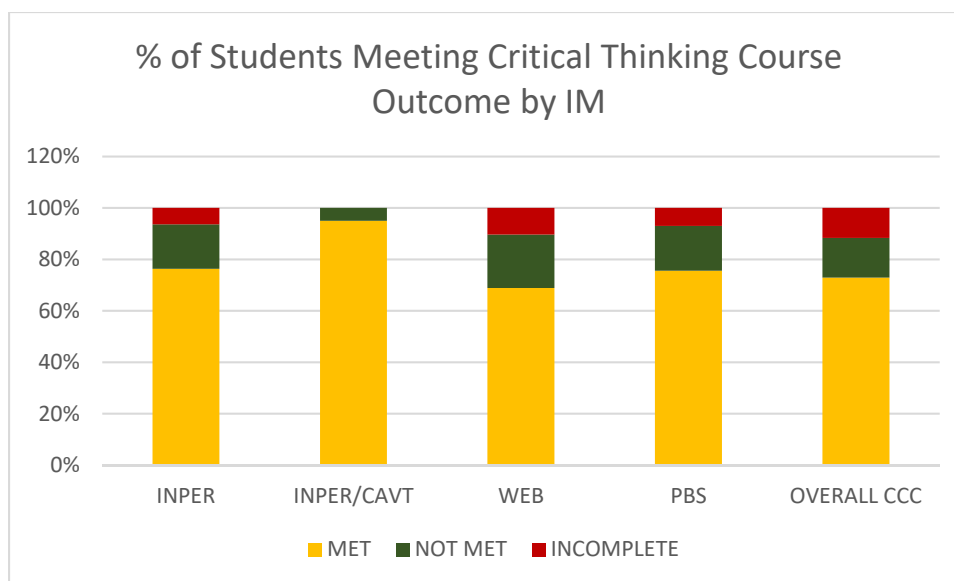
Program-Level Outcome: Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

PHYSICAL & BIOLOGICAL SCIENCES (P&BS) BY COURSE



COURSE	MET	NOT MET	INCOMPLETE	N =
BIO 100	63%	23%	13%	2
BIO 181	87%	6%	7%	4
BIO 182	74%	19%	7%	1
BIO 201	94%	6%	0%	1
BIO 202	71%	29%	0%	2
CHM 151	64%	36%	0%	1
GLG 105	100%	0%	0%	1
NTR 135	71%	21%	8%	1
PHY 180	54%	23%	23%	1
PBS	76%	17%	7%	14
OVERALL CCC	73%	15%	12%	68

PHYSICAL & BIOLOGICAL SCIENCES (P&BS) BY INSTRUCTIONAL METHOD



IM	MET	NOT MET	INCOMPLETE	N =
INPER	76%	17%	6%	9
INPER/CAVT	95%	5%	0%	1
WEB	69%	21%	10%	4
PBS	76%	17%	7%	14
OVERALL CCC	73%	15%	12%	68

PHYSICAL & BIOLOGICAL SCIENCES (P&BS) COURSE-LEVEL OUTCOMES MEASURED

- BIO 100 Present examples of significant current events in science and explain their significance.
- BIO 100 Discuss the main biotechnologies and explain the implications of genetic engineering from both a societal and individual point of view.
- BIO 181 Describe in writing several different mechanisms by which genes and the encrypted code are altered in the natural world
- Describe how humans have manipulated DNA through biotechnology and apply these research findings to agriculture, medicine, cloning and ethics
- BIO 181 Describe in writing several different mechanisms by which genes and the encrypted code are altered in the natural world.
- Describe how humans have manipulated DNA through biotechnology and apply these research

findings to agriculture, medicine, cloning and ethics.

BIO 181 2. Use of the scientific method from making careful observations, designing good experiments, recognizing assumptions and the presentation of results

2. Apply the scientific method to previous research and in their lab studies

BIO 181 19) Describe how humans have manipulated DNA through biotechnology and apply these research findings to agriculture, medicine, cloning and ethics

BIO 182

- describe the origin and diversification of eukaryotes
- describe trends in plant evolution
- describe the structural changes necessary for plants to successfully transition to land (vascular tissue, flowers, and seeds) and the evolutionary advantage of each
-

BIO 201 ***Please note: the critical thinking assignment for this class is split into two parts. The Final Practical and the Final Lecture Exam. The final practical is a visual test, and thus the questions are not submitted. The final exam is available on CANVAS. It is called "final exam" under "exams" in the quiz section.

* identify in anatomical models, diagrams, photos or other media, the major anatomical features of the skeletal, muscular, nervous, and integumentary systems;

* describe the physiological processes involved in the contraction of muscle, the generation of a nerve impulse and the propagation of nerve impulses in the nervous system;

* list and construct in models the basic organic molecules present in the human body;

* state in written form the relationships between physiological dysfunction and homeostatic response citing examples from the nervous systems;

* recognize in histological section selected samples of human body;

* demonstrate the function of the articulations in human body;

* identify in anatomical models the major features of the human nervous system;

* describe reflexive behavior; and

* explain how the human nervous system integrates sensory information and provides appropriate output.

BIO 202 Explain the processes by which nutrient materials enter the body, are digested or otherwise manipulated and ultimately are converted into either body components or energy-rich molecules for body use.

BIO 202 Demonstrate an understanding of the homeostatic regulation of blood chemistry by citing examples from endocrine, cardiovascular, respiratory and renal physiology

- CHM 151 All course outcomes as mentioned in the course outline of CHM151 are used to assess the critical thinking.
- GLG 105 There are multiple labs and in-class exercises (mostly on individual planets) that require critical thinking. However, in my opinion none is more important than Lab No. 1 - Scales, since it sets the stage for subsequent discussion and materials. (This lab, with answers, is included in Question 5). The distances, sizes, and ages for bodies in Astronomy and more specifically Planetary Science are outside most people's every day reality. We deal mostly in mundane things like miles driving, the span of a lifetime (70-80 years), etc. In Planetary Science we can deal in bodies that are thousands to a million (plus) km in diameter, distances in billions of km or light years, and ages in the billions of year. Conceptually, it is difficult for people to comprehend the concepts. Although Lab No. 1 - Scales, along with class lectures, go a long way to help students understand this, it is work that extends for several lectures and labs. We complete the lab in class, I review individual student results, and then jointly review in class. In my experience understanding these concepts take longer than I would like.
- NTR 135 Utilize a nutritional intake assessment inventory.
- PHY 180 Gaining a better understanding of Science

PHYSICAL & BIOLOGICAL SCIENCES (P&BS) COURSE CHANGES

- BIO 100 This is the first time I've offered this project, so have not yet refined for future semesters.
- BIO 100 I'm not teaching for CCC again after this semester, so I will not be taking any action to adjust my instruction.
- If I were to make a suggestion, the course outcomes are in desperate need of rewriting. The current outcomes are written to only require very low-level thinking skills. Generality is appreciated as it fosters academic freedom, but if you want students' critical thinking to be assessed, put that in the course outcomes, if for nothing else, then so that they are aware of that. I literally had a student tell me that I shouldn't be assessing critical thinking because she was learning that in another class.
- If I were to make another suggestion, it would be to include an actual education expert in decisions regarding course assessment and writing of outcomes. As in, someone who has formally studied education, pedagogy, and assessment, not just someone who has been at the college for 20 years and read a book about critical thinking once.
- BIO 181 This next semester I will be incorporating a weekly writing assignment to prepare students for their critical thinking GMO essay at the end of the semester.
- BIO 181 This next semester I will be incorporating a weekly writing assignment to prepare students for their critical thinking GMO essay at the end of the semester.
- BIO 181 No action take at this time as success rate for Fall 2017 (I am defining as proficient or mastery as described in Question 7) was greater than 95 %

- BIO 181 I will need to update the material to ensure it is topical, as current research is constantly changing the nature of the field.
- BIO 182 In this case this was the first time using this discussion post. Based on the feedback and high percentage of successful completion no change will be made.
- BIO 201 I am satisfied with the student's knowledge based at the end of this course. It seems that they understand the basic principals of Anatomy and Physiology, and are generally competent in identifying anatomical features from the required organ systems.
- I would love students to perform better on practical assessments. This is tricky because the most effective way to achieve higher scores in this area is to spend time with the models and microscopes. In my experience, about 4 additional hours of model time are needed a week to properly learn the models et al. Open labs were offered this year on Fridays. Some of my students attended, but others worked during the hours offered. The open labs were operated by a student who previously took the class and did very well. I suggested expanding this program next semester.
- For me, I find that many students learn the concepts better when I supplement YouTube videos that cover the topics in a fun, interactive way (I.E. Crash Course). Outside of the relevance of the material, this is often the first time they learn that there are great resources available for them, for free, on stream sites like YouTube. Next semester, I will make some of these videos mandatory, with a couple quiz points dedicated to an event that occurred in the videos (to keep them honest).
- BIO 202 Most students met the criteria. I used a quiz to measure this. In the future I will use a specific essay question to measure to get a better feel for the students ability to explain what they learned.
- BIO 202 No action was necessary at this time as a large majority mastered the exercise and the other 5 earned 9 or 9.5 points out of 10.
- CHM 151 Many students are new to the standardized testing and find these tests are comparatively tricky than rest of the assignments of the class. This kind of standardized test is comprehensive and demands an overall understanding of the subject. It requires the ability to think critically and develop the interdisciplinary knowledge of the science as a whole.
- To improve the success rate in this type of assessment, the student needs adequate exposure early in the class. Students should be exposed to ACS practice test and can be included in the course content. However, it will involve additional cost to the student. It may be a challenge to the student who is financially challenged
- GLG 105 This was my first time teaching this class, and my starting point was the material left by my predecessor. I would say that about a third of the material used in the class was from the previous professor - I built the rest. As the semester progressed, I modified the class structure to include more hands-on exercises and less lecture. This has worked best for the fellow geology professors I consulted. Multiple activities keep the students more focused.

Next time I will add more hands-on exercises and make sure that students understand concepts before moving forward. Also, in addition to the three exams I give, I plan to add quizzes to further gauge progress and understanding. Short movies will continue to be part of the class, followed by discussion periods.

One comment I heard several times is that there was a lot of material. Unfortunately, that is the nature of the subject. There is a lot of factual information. Hopefully, with the changes implemented, it will enhance the learning experience.

NTR 135 In analyzing why 5 students did not meet criteria for the assignment I found that:
2 of them submitted the assignment after the due date.
3 did not respond to the self analysis questions completely or at all.

I did start to send out reminders of upcoming assignments, criteria and due dates. I also send out reminders that students could submit late written assignments with points deducted for late submission.

PHY 180 Students who attempted the exercise were quite successful. Since this is an intro course with no pre-reqs there tends to be a large proportion of unfocused students. The best action would be to add some pre-reqs for the course.

Fall 2016-Fall 2017 Course Assessment Reports

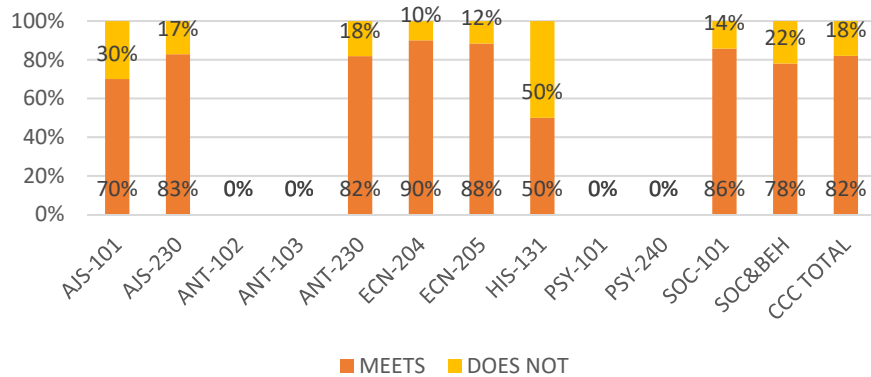
Social & Behavioral Sciences

FALL 2016 GENERAL EDUCATION CRITICAL THINKING

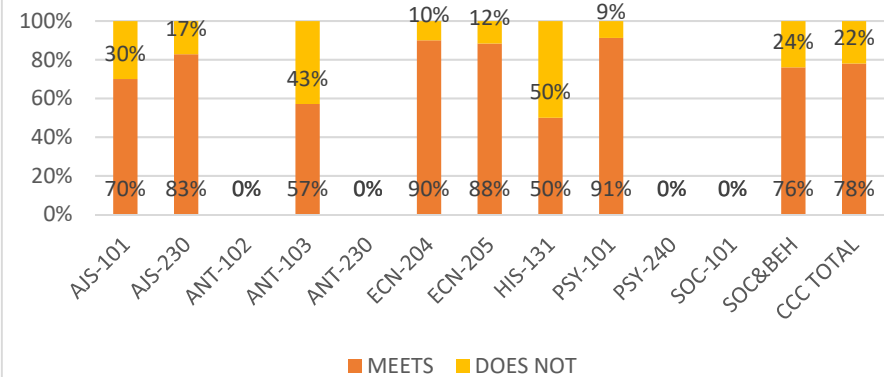
Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

SOCIAL & BEHAVIORAL SCIENCES

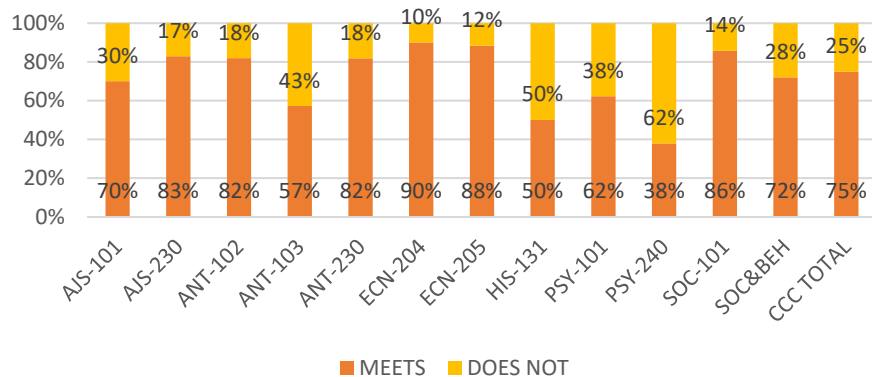
Formulate vital questions and problems in a clear and precise manner.



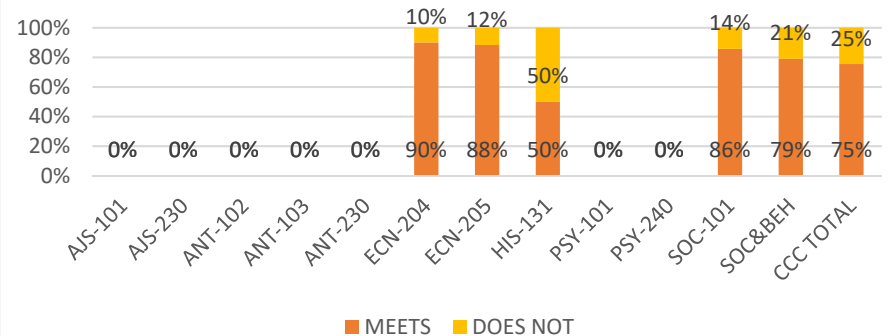
Gather, assess, and interpret information within a theoretical framework.



Develop well-reasoned conclusions and solutions to problems.



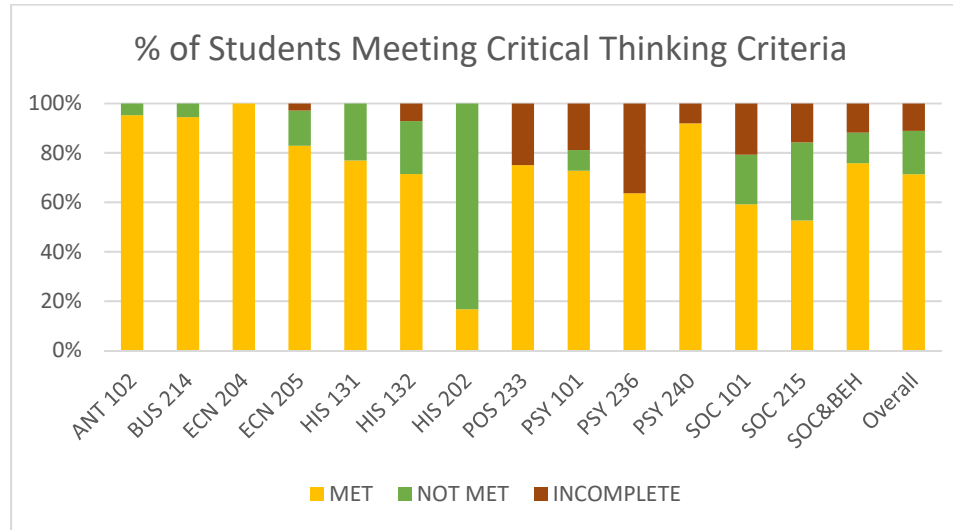
Recognize and assess the assumptions, implications, and consequences of different theoretical frameworks.



SPRING 2017 GENERAL EDUCATION CRITICAL THINKING

Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

SOCIAL & BEHAVIORAL SCIENCES



COURSE	MET	NOT MET	INCOMPLETE	N =
ANT 102	95%	5%	0%	2
BUS 214	94%	6%	0%	1
ECN 204	100%	0%	0%	3
ECN 205	83%	14%	3%	3
HIS 131	77%	23%	0%	1
HIS 132	71%	21%	7%	1
HIS 202	17%	83%	0%	1
POS 233	75%	0%	25%	1
PSY 101	73%	8%	19%	6
PSY 236	64%	0%	36%	1
PSY 240	92%	0%	8%	3
SOC 101	59%	20%	21%	5
SOC 215	53%	32%	16%	1
SOC&BEH	76%	12%	12%	29
Overall	71%	18%	11%	115

SOCIAL & BEHAVIORAL SCIENCES Assessment Criteria

ANT 102

- Are they able to apply the vocabulary and material to their own lives or can they not make that connection? Are they only able to see them as vague and not personal concepts?
- Are they able to apply the vocabulary to their own lives or are they only viewing them as vague concepts that have no relevance to them?

BUS 214

- How well did the students develop their legal analysis of their topic logically and by using their legal sources to better develop their paper.

ECN 204

- Students must score a 3.5/5 on completed assignments.

ECN 205

- Students must score 3.5/5 on completed assignments.
- Did the student solve the problem in the time allotted?

HIS 132

- History students usually write "term papers" where they retell history. In my class, students had to look to the events that happened after, to discuss the way their topic influenced later events and people.

HIS 202

- Student demonstrates the ability to: Provide a summary of material from three sources Assess relevance Identify point of view Compare and contrast differing perspectives Explain both how and why different interpretations may occur Evaluate comparative utility of different sources while providing the criteria used for evaluation.

PSY 101

- whether or not students were able to fully apply and elaborate on each concept by providing clear support and detail
- In a writing assignment, students were instructed to dedicate a section to critically evaluate the topic using logic and objective reasoning.
- whether or not students can fully apply concepts chosen to their life or to someone that they know
- ability to fully apply and elaborate on concept
- Students were rated as "Meets," "Partially Meets," or "Does Not Meet" based upon their ability to look at the provided situation from a variety of viewpoints.

PSY 236

- A student was required to achieve 12 points or more based on a 20 point rubric that was designed to only assess critical thinking, and no other criteria was used to determine the "meet" or "does not meet" criteria.

PSY 240

- Students needed to achieve 12 points based on a 20 point rubric to satisfy the "meet" designation.
- Critical Thinking Rubric for Psy 101 & Psy 240. Based on California State Univ, Fresno Gen Ed Scoring Guide for Critical Thinking

- Students were rated as "Meets," "Partially Meets," or "Does Not Meet" based upon their ability to look at the provided situation from a variety of viewpoints.

SOC 101

- Part 1) The students were asked to define two terms, "ethnocentrism" and "cultural relativism" in their own words, and in addition to provide a "real world" example of both terms. ("Gather, assess, and interpret information.") As defined by the course outcomes, "3. recognize the link between culture and society as it relates to values, beliefs, and norms". Part 2) By constructing a solid argument, and providing an example of how Media informs and/or distracts us. ("Develop well-reasoned conclusion") As defined in the course outcomes as "5. investigate the main agents of socialization: family, peers, and the media". Part 3) By describing the argument of "rape culture" and developing their own opinion on it, and by being able to defend their point of view in a clear manner, with a well developed argument. ("Formulate vital questions and problems clearly.") As defined by the course outcomes both #3 and #5. A score of 80 points or above = "Meets" (100 point scale)
- Gather, assess, and interpret information within a theoretical framework via the following; recognize the link between culture and society, social groups/statuses/roles, and agents of socialization.
- Develop well-reasoned conclusion and solutions to problems by explaining the link between perceived deviance and crime in the U.S.
- Students meet the criteria by examining a social issue using published, collected data. They summarize and explain the findings, evaluate the findings and examine the findings from different perspectives. Last, the students apply what they have learned to the social issue and analyze their impacts.

SOC 215

- Students will be able to identify factors that determine a dominant and subordinate group by developing well-reasoned conclusion and solutions to problems

SOCIAL & BEHAVIORAL SCIENCES Course Changes

7 out of 29 sections will be making changes to their curriculum based on the assessment data.

- I'll provide more in-class opportunities to apply concepts (i.e. apply classical conditioning to your life - ensure to identify the UCS, UCR, CS, CR)
- I will focus more on the instructions of this and dedicate some time to discussing critical thinking. Although this was briefly discussed at the beginning of the semester, more time may need to be dedicated to the subject.
- continue to focus upon applying concepts to the world around us
- I continually update, revise and improve my assignments. I also attended a seminar "Assessing Critical-Thinking with Student-Created Work." My goal is to make the assignment as applied as possible and also help students to develop their critical thinking abilities and skills.
- Some of the students were close to finding the correct response. I think more time (5 minutes) would have led to a higher success rate.
- Online courses are difficult to "lecture". I have had one assignment that asks students to ask 100 random questions. I am going to keep that assignment, but also have them submit 20 questions specifically for their topic/thesis.
- provide more opportunities for applying concepts

SOCIAL & BEHAVIORAL SCIENCES Critical Thinking Definitions

Challenging ourselves to see the world from a perspective other than the one we were raised with or our own culture. Questioning what is "truth" and attempting to see other versions of it. In particular, are they able to relate the reading and discussions to their own lives?

To understand world/national matters from a legal perspective and how legal changes impact world/nation.

Being able to apply economic terms and concepts in real world situations.

Solving a problem with a given set of information and NOT given the method to solve the problem.

In history, critical thinking asks the questions of why something occurred and who were the people who caused it, but most importantly, we need to know is what happened next - how did the event or person(s) influence the events that came after. Looking backwards, analyze the events from then until now that were influenced by the event or person(s).

Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information.

applying psychological concepts to your life or to someone you know

Students are able to critically evaluate a topic, consider the research and evidence and formulate an opinion based on this information.

demonstrate understanding of psychological concepts by applying them to the world around you

Ability to complete the following activities:

- Identifies and understands the influence of context/background
- Identifies and supports own (student's) position/view of the problem, question or issue
- Identify and analyze other relevant positions/views of the problem, question or issue
- Identifies and assesses conclusions, implications, and consequences

Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information. Students will summarize major theories affecting women to assess historical and psychological perspectives and to evaluate contemporary viewpoints and current perceptions of roles relating to the psychology of women.

Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information.

"Thinking that does not blindly accept arguments and conclusions. Rather, it examines assumptions, appraises the source, discerns hidden biases, evaluates evidence, and assesses conclusions." (for the text)

Critical Thinking means utilizing solid arguments based on evidence and justifiable reasoning to assess what is "true". This is accomplished by avoiding the use of anecdotal references alone, recognizing our own biases, and by using our own experiences with our Agents of Socialization, to guide us in asking the important questions of how we understand what is "truth".

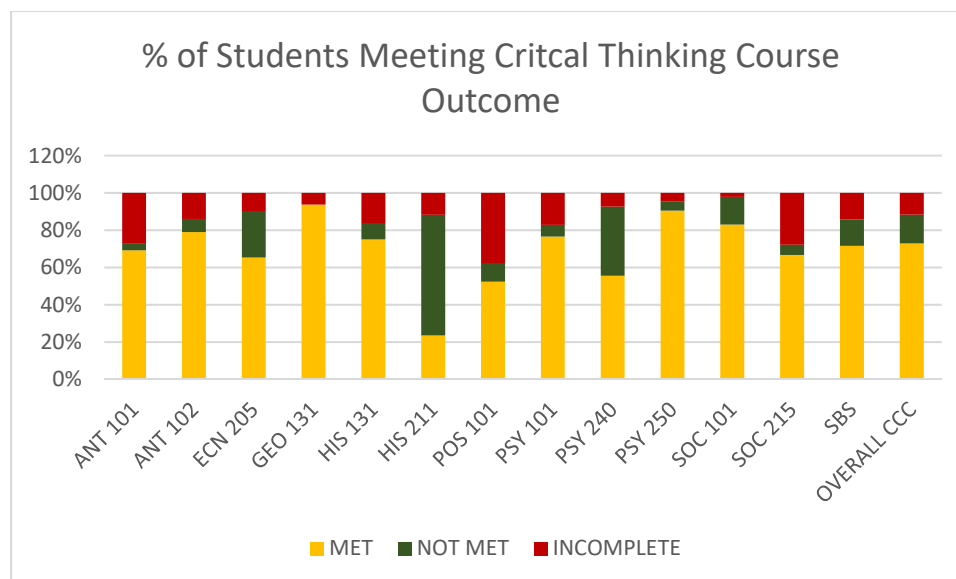
Critical thinking can be looked at as understanding one's inter-subjective reality and the way that plays into how we as individual's and society understand experience as knowledge via that reality. The next step is epistemology; how to move from simply stated opinions to justified arguments.

Critical thinking is a process of actively analyzing claims. It is objectively evaluating information and data to determine what claims are valid and supported by evidence and what claims are invalid and not supported by evidence. Core critical thinking skills include explanation, evaluation, interpretation, inference and analysis. Ultimately, it is the ability to apply reasoning and logic to claims, situations, opinions and findings. In sociology, the student is encouraged to look at issues and concepts from several different perspectives and determine the most plausible claim/outcome.

FALL 2017 GENERAL EDUCATION CRITICAL THINKING

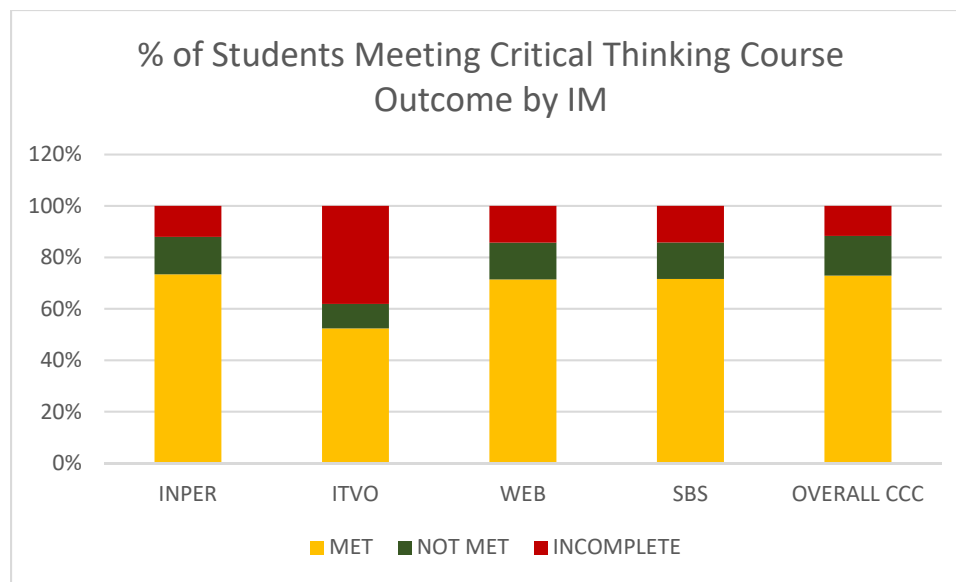
Program-Level Outcome: Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

SOCIAL & BEHAVIORAL SCIENCES (S&BS) BY COURSE



COURSE	MET	NOT MET	INCOMPLETE	N =
ANT 101	69%	4%	27%	1
ANT 102	79%	7%	14%	2
ECN 205	65%	24%	10%	2
GEO 131	94%	0%	6%	1
HIS 131	75%	8%	17%	1
HIS 211	24%	65%	12%	1
POS 101	52%	10%	38%	1
PSY 101	77%	6%	17%	3
PSY 240	56%	37%	7%	1
PSY 250	90%	5%	5%	1
SOC 101	83%	15%	2%	2
SOC 215	67%	6%	28%	1
SBS	72%	14%	14%	17
OVERALL CCC	73%	15%	12%	68

SOCIAL & BEHAVIORAL SCIENCES (S&BS) BY INSTRUCTIONAL METHOD



IM	MET	NOT MET	INCOMPLETE	N =
INPER	73%	15%	12%	10
ITVO	52%	10%	38%	1
WEB	71%	14%	14%	6
SBS	72%	14%	14%	17
OVERALL CCC	73%	15%	12%	68

SOCIAL & BEHAVIORAL SCIENCES (S&BS) COURSE-LEVEL OUTCOMES MEASURED

ANT 101 There are no course outcomes that specifically cite critical thinking.

ANT 102 Investigate the concept of culture and the diversity between and within communities with an understanding of ethnocentrism, relativism, and reflexivity;

Explore and apply the various theoretical and methodological perspectives used in cultural anthropology, including applied anthropology

Investigate the concept of culture and the diversity between and within communities with an understanding of ethnocentrism, relativism, and reflexivity

ECN 205 examine and explain the structure of the American economic system;
Summarize market influences and theories.

GEO 131 5. Apply the theories and concepts of physical geography to local and global issues.

- HIS 131 Explain and analyze the colonial process and the motivation behind the process.
- HIS 211 Course Outcomes: Students will: 1. Develop an awareness of the processes of historical change. 2. Recognize the common characteristics behind civilization's development. 3. Apply interdisciplinary methods to the study of civilizations. 4. Develop comparative criteria for cross-civilizational analysis from a global perspective 5. Explore cross-cultural interactions as a source of historical change. 6. Demonstrate an ability to critically evaluate and cogently synthesize diverse information. 7. Connect contemporary political, social, religious, and cultural conditions with the past.
- POS 101 Describe and explain the nature of politics and political power:
1. Identifies the problem, question or issue
 2. Presents own perspective
 3. Employs data and evidence
 4. Recognition of perspectives and positions
 5. Has conclusion and discussion of implications, consequences and/or significance
 6. Effectively Communicates (written)
 7. Effectively Communicates (verbally)
- PSY 101 Be able to use Critical Thinking skills to produce a 6 page Empirical paper in APA format. Then be able to present the class in a logical order
- * Define the vocabulary and concepts used in the field.
 - * Describe the scientific method and the research methodologies used in the field of psychology.
 - * Demonstrate an understanding of the historical and current theoretical frameworks that influence the field of psychology.
 - * Describe the relationship between the brain and behavior.
 - * Discuss the role of nature and nurture and their influences on human behavior.
 - * Discuss biological, behavioral, cognitive, and social development across the lifespan.
 - * Describe the role of psychology in contemporary society and apply relevant concepts and theories to student's own experiences.
- Discuss the role of nature and nurture and their influences on human behavior (concerning diet and brain development and function, specifically).

- PSY 240 Recognize and assess the assumptions, implications, and consequences of different theoretical frameworks.
- PSY 250 write a research paper using APA format.
- SOC 101 Recognize the link between culture and society as it relates to values, beliefs, and norms
Demonstrate how social structure is interconnected to social groups, status and roles.
- SOC 215 Students will be able to discuss the social construction of race in America

SOCIAL & BEHAVIORAL SCIENCES (S&BS) COURSE CHANGES

- ANT 101 A total of 18 students participated in all three activities for this assessment. The highest pre-seminar score was a 15 with a low score of 5 (Table 1). The average pre-seminar score was 11.5. The highest post-seminar score was a 20 with a low score of 6. The average gain was 2.9. Consequently, the discussion activity resulted in a positive gain in critical thinking skills for this particular activity.
- Overall, I was pleased with the gain -- given this was just the second week of the course. I think I could improve these gains by providing better instructions that discuss critical thinking. Since I didn't know that I would be assessing this assignment using the Critical Thinking VALUE rubric, I assessed this activity using different criteria. Now that I know this is a college-wide expectation, I can better communicate the instructions with my students.
- ANT 102 This is about what I expect to see at the end of the semester and about the same for my other 2 classes that I looked at this in. Those particular students were also less engaged with the material than others throughout the semester, one student has not been to DR for evaluation but should be (per her grandmother). I will continue reiterate the relationships between each chapter. I won't change the format of the questions as these relationships effect the lives of our students too.
- The students have an earlier discussion on the concept of race, for which they watch one of the videos in the assignment. Any student who does not perform well in these discussions or who does not display an understanding of the topics is addressed at that time. The assignment is their final paper and is a culmination of many weeks of learning/discussing the required concepts. The majority of students who complete the paper do not have any issues with the topic.
- ECN 205 Focus on actions to describe how to do the assignment better.
- No action necessary.

- GEO 131 All students that attempted the project demonstrated understanding of the assignment, were able to construct a proposal based upon concepts learned in class, and showed the ability to apply concepts and theory to real world problems.
- HIS 131 No action or adjustment is necessary at this time because present methods are effective.
- HIS 211 No action taken.
- POS 101 Students have to submit four individual critical analyses and two group analyses, as a result by the end of the semester students are able to complete this assignment.
- Re-work rubric given to students to make the expectations of what a passing paper looks like.
Re-work rubric given to students to help them better understand how to show Critical Thinking in a research paper.
- PSY 101 No action was necessary, as the only people who did not meet criteria were the two who did not turn in a paper.
- No action was necessary because all students who attempted the assignment understood the connection between malnutrition and brain development and later brain functioning.
- PSY 240 I will likely focus a couple more assignments on critical thinking specifically.
- PSY 250 Some students didn't make changes from the rough draft and had their final papers returned so that appropriate changes could be made. Therefore, I'm considering adding an additional step or checklist for students to complete prior to turning in their final draft to help ensure students have addressed the criteria by which the paper will be graded.
- SOC 101 Course Outcome 3. recognize the link between culture and society as it relates to values, beliefs, and norms;
- Sociology requires critical thinking! Throughout the semester, I implore my students to use critical thinking skills not only in the classroom, but in their day to day lives. I urge them to explore their own beliefs about the world, and challenge them to determine WHY they hold these opinions to be true. I encourage them to research all "sides" of a point of view and reflect at all times. I require statements based in factual research to support their own assessments. I remind my students that everyone is entitled to their own points of view, but for those opinions to be considered noteworthy they must be supported by well researched facts. Sociology is about asking "why?" and looking for connections as to why certain phenomenon take place in society.
- With that said, I feel that all of my assignments include components of use of critical thinking skills. This assignment is in three parts; Part One deals with the terms Ethnocentrism and Cultural Relativism, Part Two with how Media impacts our society, and Part Three with the rather sensitive topic of Rape Culture. All three parts ask my students to examine these concepts through the use of their critical thinking skills by; defining the terms in their own words, applying these terms to their own examples, and defending their own points of view through the use of statements based on factual research as well as reflecting on how their

own experiences impact their opinions. I feel that this is a solid assessment and plan on using it again in future semesters without much change to Part One. I would like to change Parts Two and Three slightly to incorporate more of the recent news coverage of the topic's of "fake news" in regards to Media, as well as the topic of sexual harassment in regards to Rape Culture. My goal is to teach my students how imperative it is to utilize their critical thinking skills in every aspect of their lives, but especially in our current climate of Media saturation.

After reviewing student work, I saw that the students who did not meet the criteria had also missed early work/assignments. Since this assignment built on previous work, I will make sure to stress the importance of the earlier work in future courses. Also, the students who did not meet the criteria spent very little time on the assignment. While earlier essay questions were similar, I will be sure to note how much time is expected to prepare for and complete the assignment in the instructions in the future.

SOC 215 I would warn students via email that they will be watching three hours at minimum for this one assignment, it can be overwhelming information.

Fall 2016-Fall 2017 Course Assessment Reports

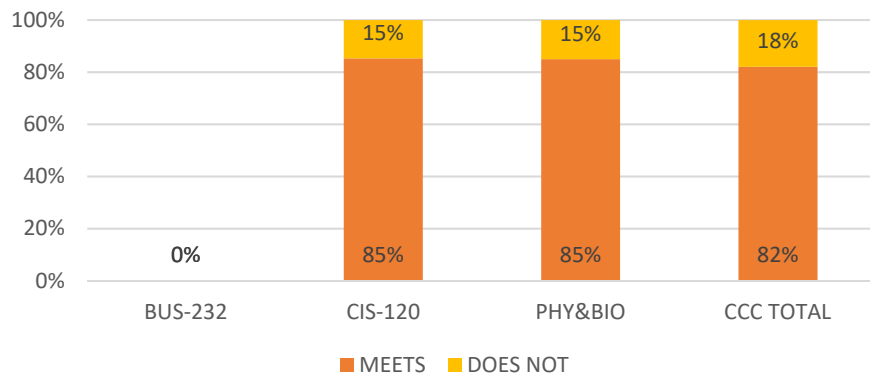
Option Courses

FALL 2016 GENERAL EDUCATION CRITICAL THINKING

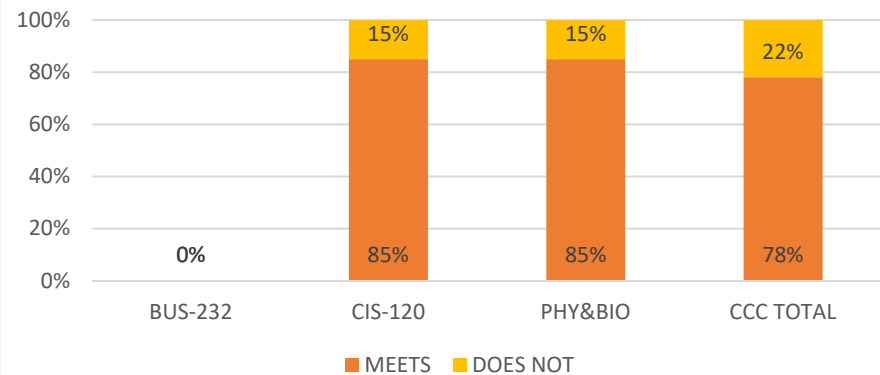
Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

OPTIONAL

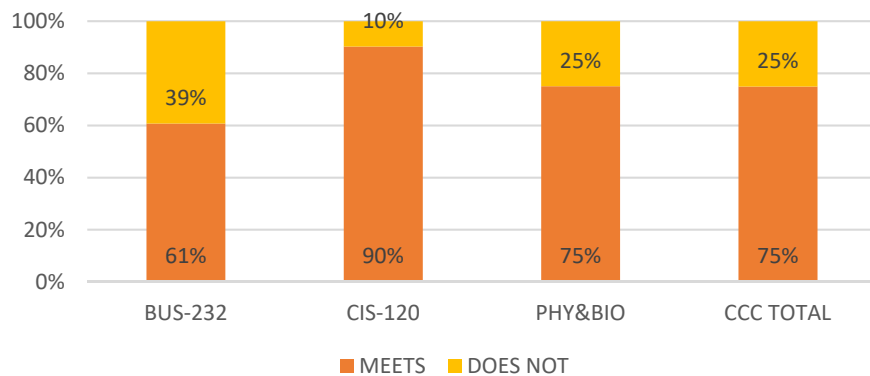
Formulate vital questions and problems in a clear and precise manner.



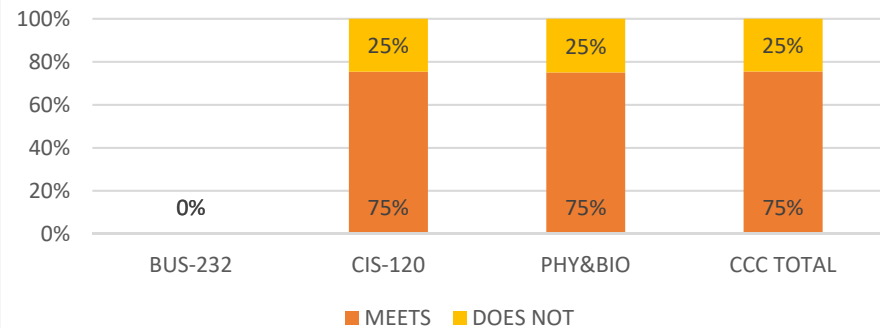
Gather, assess, and interpret information within a theoretical framework.



Develop well-reasoned conclusions and solutions to problems.



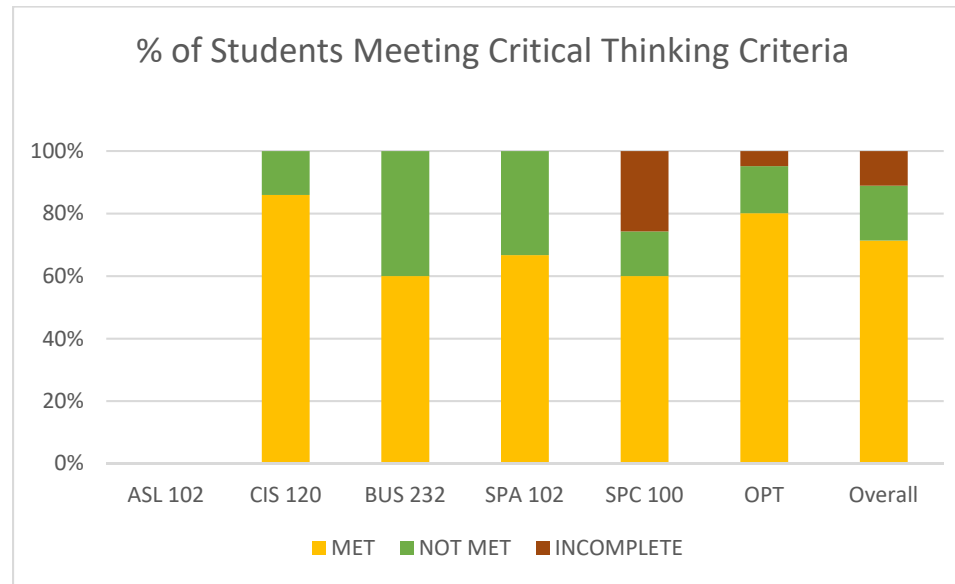
Recognize and assess the assumptions, implications, and consequences of different theoretical frameworks.



SPRING 2017 GENERAL EDUCATION CRITICAL THINKING

Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

OPTIONAL



COURSE	MET	NOT MET	INCOMPLETE	N =
ASL 102				
CIS 120	86%	14%	0%	6
BUS 232	60%	40%	0%	1
SPA 102	67%	33%	0%	1
SPC 100	60%	14%	26%	2
OPT	80%	15%	5%	10
Overall	71%	18%	11%	115

OPTIONAL Assessment Criteria

CIS 120

- The questions are all asked in a multiple choice format. So, if a student responds correctly then they “Meet”, an incorrect response then leads to a “Does not meet”.

BUS 232

- If a student earned 60% or better on the statistics project.

SPA 102

- Criteria was on how well the students know the verbs used and in the correct tense according to their story. They also had to write a brief explanation of the verbs used for that particular tense.

SPC 100

- Did the student apply the critical thinking skills learned in the textbook and class lecture to complete the assignment.

OPTIONAL Course Changes

10 out of 10 sections will be making curriculum changes due to the assessment results.

- The CIS Department would like to evolve our questions to dig a bit deeper into the student’s comprehension of these critical thinking concepts. After viewing the first few rounds of results we are getting a feel for how we might re-word the questions in the future.
- I will formally incorporate more fallacy identification throughout the course.
- I will define critical thinking early on in the course and spend more time explaining the ramification of their decisions. Also emphasize using technology more than using formulas.

OPTIONAL Critical Thinking Definitions

The ability to use knowledge you already have to extrapolate meaning and answers in new scenarios including the ability to question and analyze your assumptions and the assumptions of the speaker.

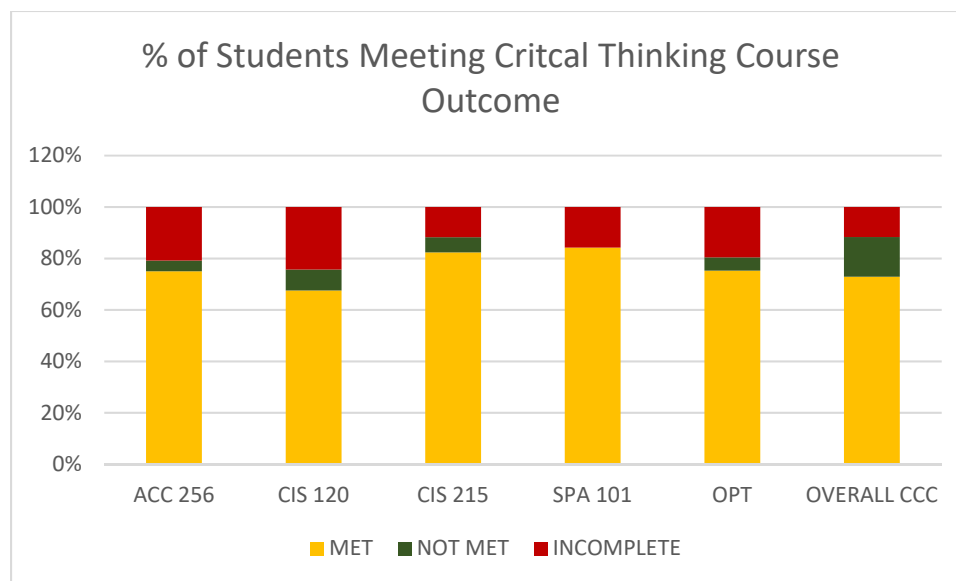
In CIS120, we use a variety of questions (across 2 separate exams) to test whether students are taking the basic topics we are introducing and applying them in a deeper thought process. The questions we are using to evaluate this require students to take a basic concept we have introduced and then think critically about that basic concept to answer the question. The answers to the questions were not provided to students in a black and white form during the class.

Students will make informed decisions.

FALL 2017 GENERAL EDUCATION CRITICAL THINKING

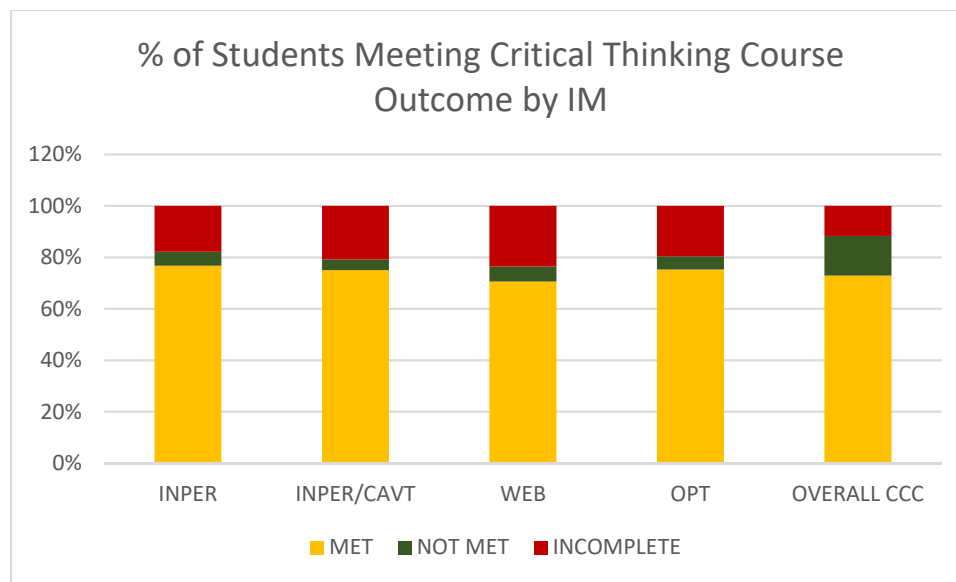
Program-Level Outcome: Using a variety of inquiry methods, resources, and reasoning skills that support and promote lifelong learning.

OPTIONS (OPT) BY COURSE



COURSE	MET	NOT MET	INCOMPLETE	N =
ACC 256	75%	4%	21%	1
CIS 120	68%	8%	24%	2
CIS 215	82%	6%	12%	1
SPA 101	84%	0%	16%	1
OPT	75%	5%	20%	5
OVERALL CCC	73%	15%	12%	68

OPTIONS (OPT) BY INSTRUCTIONAL METHOD



IM	MET	NOT MET	INCOMPLETE	N =
INPER	77%	5%	18%	3
INPER/CAVT	75%	4%	21%	1
WEB	71%	6%	24%	1
OPT	75%	5%	20%	5
OVERALL CCC	73%	15%	12%	68

OPTIONS (OPT) COURSE-LEVEL OUTCOMES MEASURED

- ACC 256 Demonstrate problem solving techniques through accounting problem analysis.
- CIS 120 7. Identify issues related to security, ethics, and privacy when using a computer.
- CIS 120 Course Outcome: #7 Identify issues related to security, ethics, and privacy when using a computer.
- CIS 215 Generate functioning code using fundamental structured programming concepts
- SPA 101 Students will derive meaning from written material where context and/or extralinguistic background knowledge are supportive.

OPTIONS (OPT) COURSE CHANGES

- ACC 256 No action necessary. The majority of students understood how to apply the ratio. The one student who received a 50%, did not answer the question fully, and in fact, did not read the directions carefully in completing the problem.
- CIS 120 For this specific question, no action is required at this time. We would like to see if future courses show similar results for the question.
- CIS 120 For this specific question, no action is required at this time. I would like to see if future courses show similar results for this question.
- CIS 215 The project was to combine five program modules together. A main module determines when and how to invoke the other modules.
- Two of the four subordinate modules were already done as previous homework assignments. The other two had to be created new for this project.
- When I do this again, I will assign all four subordinate modules from previously completed homework. The objective of this was how to put the single programs into a larger combined program. The "how to" and methods to do this are what requires the critical thinking.
- SPA 101 After hearing the responses and examples from the various small groups, we came to a conclusion that many times the meaning of a word can be derived from contextual cues found within the written text or spoken language. Students had to deduce the meaning on their own first to arrive at this realization.