



Contemporary Challenges –

CCD: Diversities and Social Inequalities (3 credits) - Students must take one course that meets one or both goals.

GOAL CCD-1 - Student is able to... Analyze the degree to which forms of human differences and stratifications among social groups shape individual and group experiences of, and perspectives on, contemporary issues. Such differences and stratifications may include race, language, religion, ethnicity, country of origin, gender identity, sexual orientation, economic status, abilities, or other social distinctions and their intersections.

their intersections.			
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
1	Examines how some types of human difference or social stratification relevant to the course generate unequal distributions of power and are linked to individual or group experiences of, and perspectives on, contemporary issues. Demonstrates an understanding of some effect(s) of those differences or stratifications on unequal distributions of power and a contemporary challenge.	Identifies links between a type of human difference or social stratification relevant to the course, unequal power distributions, and individual or group experiences of, and perspectives on, contemporary issues, largely through satisfactory presentation of course materials. Demonstrates some understanding of how some differences or social stratifications affect unequal distributions of power and a contemporary challenge.	UNSATISFACTORY Fails to link significant forms of human difference or social stratification relevant to the course to power inequalities or individual or group experiences of, and perspectives on, contemporary issues as relevant to focus of the particular course. Fails to delineate the impact of differences or social stratifications on the issues that are central to the course.





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CCD: Diversities and Social Inequalities (3 credits) - Students must take one course that meets one or both goals.

OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
Provides detailed critical analysis	Provides a robust explanation of	Satisfactorily presents course	Shows little understanding of what
of what "social justice" means in	what "social justice" means in	material on what social justice	is meant by social justice and little
contemporary contexts and offers a	contemporary contexts.	means in contemporary contexts.	or no reflection on the meaning of
critical assessment of existing approaches.	Explains the causes of one or more unbalanced social power system(s),	Describes causes of unbalanced social power system(s) with some	social justice or the role context might play.
Provides a sophisticated	placing them in contemporary	attention to contemporary	Minimal and/or unexamined
exploration of the causes of one or	contexts.	contexts.	claims about causation.
more unbalanced social power system(s) and their connections to other contemporary issues.	Demonstrates an understanding of the goal of advancing social justice in the context of unbalanced social	Touches on obstacles to and resources for change, and alternative solutions.	Fails to provide any context for the existing state of affairs, or any coherent discussion of paths to
Critically and thoughtfully	power systems and who/what		change.
evaluates ways to advance social	would need to change to achieve		Police on oninion and notomic
justice in the context of unbalanced	social justice in a particular context.		Relies on opinion and polemic.
social power systems.	Identifies resources for and		
Demonstrates original thinking in	obstacles to change, and		
identifying resources for and	alternative solutions.		
obstacles to change, and			
alternative solutions.			





Contemporary Challenges –

CCO: Our Common Future (3 credits) - Students must take one course that meets one or both goals.

OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
Demonstrates a sophisticated understanding in identifying, comparing, and contrasting at least two different disciplinary perspectives as applied to a pressing contemporary global issue. Critically analyzes and assesses the advantages/ scope and disadvantages/ limits of each perspective. Draws original and thoughtful	Identifies, compares, and contrasts at least two different disciplinary perspectives as applied to a pressing contemporary global issue. Notes some advantages/ scope and disadvantages/ limits of each perspective. Touches on broader connections and implications.	Satisfactorily summarizes different disciplinary perspectives on a contemporary global issue. Acknowledges that each perspective has advantages and disadvantages. Satisfactorily presents course materials.	Fails to clearly identify disciplinary perspectives on any relevant global issues. Fails to accurately distinguish between at least two different disciplinary perspectives on the issue. Fails to identify and explicate the advantages and disadvantages of each perspective.





Contemporary Challenges –

CCO: Our Common Future (3 credits) - Students must take one course that meets one or both goals.

OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
Critically analyzes the extent to which science and technology can address a contemporary social issue AND/OR critically explicates how the issue itself is the result of advances in scientific understanding or new technologies. Thoroughly explores the challenges and opportunities associated with various ways to address the issue. Demonstrates a high level of scientific literacy beyond that necessary for responsible citizenship and informed life choices. Distinguishes between questions that are fundamentally moral or political and those that are	Explains the extent to which a contemporary social issue can be addressed by science and technology AND/OR explains how the issue itself is the result of advances in scientific understanding or new technologies. Assesses possible ways to address the issue, with some attention to the complexities or challenges associated with each. Demonstrates a level of scientific literacy necessary for responsible citizenship and informed life choices. Makes some distinctions between questions that are basically moral or political and those that are scientific or technological.	Satisfactorily presents course material on the extent to which a contemporary social issue can be addressed by science and technology AND/OR how the issue itself is the result of advances in scientific understanding or new technologies. Identifies possible ways to address the issue, with some appreciation for the complexities or challenges associated with each. Demonstrates an acceptable level of scientific literacy.	Fails to articulate a link between a contemporary social issue and advances in scientific understanding or the development of new technologies. Fails to identify possible solutions or the need for possible solutions. Major gaps in scientific literacy. Fails to distinguish between scientific, moral, and political judgments. Relies on opinion or assertion instead of analysis.





Areas of Inquiry -

NS: Natural Sciences (6 credits) - *Students must take two courses that meet one or both of these goals.*

GOAL NS-1 - Student is able to Understand and apply basic principles and concepts in the physical or biological sciences.				
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY	
Fully and clearly explains and applies basic scientific principles with specificity and sophistication.	Explains and applies basic scientific principles and concepts fully and clearly.	Explains and applies basic scientific principles and concepts fully and clearly.	Fails to explain or identify and apply basic scientific principles and concepts.	
Provides in-depth description of the scientific method and its distinctive value; critically differentiates it from other approaches.	Fully describes the scientific method and its distinctive value; differentiates it from other approaches.	Fully describes the scientific method and its distinctive value; differentiates it from other approaches.	Fails to demonstrate an ability to describe the scientific method and its difference from other approaches. Relies on opinion rather than analysis.	

GOAL NS-2 - Student is able to Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory				
in scientific analysis.				
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY	
Clearly identifies and explains relationships among assumptions, method, evidence, arguments, and theory in scientific analysis, demonstrating a depth of understanding.	Identifies and explains relationships among assumptions, method, evidence, arguments, and theory in scientific analysis. Draws inferences that are consistent with the data. Offers an analysis of	Satisfactorily outlines relationships among assumptions, method, evidence, arguments, and theory in scientific analysis. Summarizes the purpose and findings of the research. Description	Fails to accurately identify and explain relationships among assumptions, method, evidence, arguments, and theory in scientific analysis. Does not summarize or interpret the	
Draws inferences that are consistent with the data; is specific and detailed in support of conclusions. Analysis of outcomes demonstrates superior understanding.	outcomes that is thorough and without errors that detract from analysis or conclusions.	of outcomes and/or support is satisfactory.	results or purposes of the research. Does not draw conclusions consistent with the data. Inadequate summary of results that involves significant errors.	

If using specific objective questions identified for each goal, the instructor may set the benchmarks for each rating as appropriate to the course				
and the discipline. For example, a typical benchmarking is laid out here:				
90% or more correct 80%-89% correct 70%-79% correct 69% or less correct				





Areas of Inquiry –

HST: Historical Analysis (3 credits) - Students must take one course that meet one or both of these goals.

OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
Presents a sophisticated analysis of the development of a significant aspect – or complex of aspects - of a society or culture over time.	Presents a clear and correct explanation of the development of a significant aspect – or complex of aspects - of a society or culture over	Satisfactorily discusses the development of a significant aspect –or complex of aspects - of a society or culture over time.	Fails to adequately explain the development of an identifiable aspect of a society or culture over time.
Makes evidence-based arguments and supports the analysis with relevant facts and theoretical frameworks.	time. Describes relevant evidence, facts, and theoretical frameworks and draws conclusions based on them.	Describes relevant evidence, facts, and theoretical frameworks.	Fails to reference relevant facts, evidence, or theoretical frameworks.





HST: Historical Analysis (3 credits) - Students must take one course that meet one or both of these goals.

GOAL HST-2 - Student is able to Fmploy historical reasoning to study human endeavors, using appropriate assumptions, methods, evidence

OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
Uses historical reasoning or research methods to present a detailed and chorough analysis of important human endeavors across time and place. Factually accurate and demonstrates a strong understanding of contexts and chronologies. Draws conclusions that are clear, convincing, and original. Clearly identifies and explains relationships among assumptions, method, evidence, arguments, and cheory in historical analysis, demonstrating a clear grasp of the complexities of the issues. Demonstrates ability to conduct independent analysis as well as critically analyzed that of other scholars.	Uses historical reasoning or research methods to present a clear and correct account of relevant human endeavor(s) across time and place. Factually correct and demonstrates a solid understanding of contexts and chronologies. Identifies and explains relationships among assumptions, method, evidence, arguments, and theory in given cases of historical analysis. Demonstrates ability to critically evaluate other scholars' analysis.	Satisfactorily presents course materials applying historical reasoning or research methods to a human endeavor. Describes central facts correctly and demonstrates an emerging understanding of the importance of contexts and chronologies in historical reasoning. Satisfactorily outlines relationships among assumptions, method, evidence, arguments, and theory in historical analysis. Demonstrates ability to make some critical evaluations of other scholars' analysis.	Fails to successfully apply historical reasoning or research methods to a human endeavor. Unaware of relevant facts, contexts, or chronologies. Fails to identify relationships among assumptions, method, evidence, arguments, and theory in historical analysis. No apparent ability to critically evaluate other scholars' analysis.





Areas of Inquiry -

SCL: Social Analysis (3 credits) - Students must take one additional course that meet one or both of these goals.

GOAL SCL-1 - Student is able to... Understand different theories about human culture, social identity, economic entities, political systems, and other forms of social organization.

other forms of social org	ganization.		
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
Presents a clear, detailed, and thorough analysis of several different theories about human culture, social identity, economic entities, political systems, or other forms of social organization.	Presents a clear and correct account of more than one relevant theory about human culture, social identity, economic entities, political systems, or other forms of social organization.	Satisfactorily discusses theories addressed in the course materials about human culture, social identity, economic entities, political systems, or other forms of social organization.	Fails to satisfactorily discuss any theory about human culture, social identity, economic entities, political systems, or other forms of social organization. Does not discuss variations in
Compares and critiques theoretical approaches; addresses their respective strengths and weaknesses; and, suggests possible extensions of analysis in new directions.	Identifies strengths and weaknesses of each theoretical approach; and, discusses its application to a particular case.	Identifies different possible theoretical approaches to a particular case.	perspective or theory in relation to the subject.





SCL: Social Analysis (3 credits) - *Students must take one additional course* that meet *one or both* of these goals.

GOAL SCL-2 - Student is able to... Employ tools of social scientific reasoning to study particular questions or situations, using appropriate assumptions, methods, evidence, and arguments.

assumptions, methods, evid	ence, and arguments.		
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
Demonstrates an advanced understanding of a range of concepts about human and social behavior and applies them to particular questions or situations with skill. Considers the strengths and weaknesses of the concepts applied, and suggests possible extensions of the analysis in new directions. Clearly identifies and explains relationships among assumptions, method, evidence, arguments, and theory in social analysis, demonstrating a clear grasp of the complexities of the issues. Demonstrates ability to conduct independent analysis as well as critically analyzed that of other scholars.	Clearly explains and applies concepts about human and social behavior in the context of applying them to particular questions or situations. Considers the strengths and weaknesses of the concepts applied. Identifies and explains relationships among assumptions, method, evidence, arguments, and theory in given cases of social and social analysis. Demonstrates ability to critically evaluate other scholars' analysis.	Satisfactorily recounts the application of concepts about human and social behavior presented in the course materials. Makes some assessment of the relative strengths of the concepts applied. Satisfactorily outlines relationships among assumptions, method, evidence, arguments, and theory in scientific analysis. Demonstrates ability to make some critical evaluations of other scholars' analysis.	Fails to describe or apply concepts about human and social behavior to particular questions or situations. Fails to identify relationships among assumptions, method, evidence, arguments, and theory in social and social analysis. No apparent ability to critically evaluate other scholars' analysis.



Areas of Inquiry –

AH: Arts and Humanities (6 credits) - *Students must take two courses and meet two of these goals.*

GOAL AHo - Student is able to Examine critically philosophical and other theoretical issues concerning the nature of reality, human experience, knowledge, value, and/or cultural production.					
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY		
Engages in sophisticated critical	Engages in critical reading of	Satisfactorily describes philosophical	Fails to identify or engage		
examination of philosophical and	philosophical and other theoretical	and other theoretical issues	philosophical or other theoretical		
other theoretical issues concerning	issues concerning the nature of	concerning the nature of reality,	issues concerning the nature of		
the nature of reality, human	reality, human experience,	human experience, knowledge,	reality, human experience,		
experience, knowledge, value, and/or	knowledge, value, and/or cultural	value, and/or cultural production	knowledge, value, and/or cultural		
cultural production central to the	production relevant to the course.	through reliance on course materials.	production.		
course.	Constructs persuasive arguments	Draws some critical conclusions	Fails to analyze or critique		
Critically analyzes these	about these philosophical or other	about these philosophical or other	philosophical or theoretical issues;		
philosophical or other theoretical	theoretical issues.	theoretical issues.	makes unsubstantiated assertions or		
issues and assesses the relative			substitutes opinion for analysis.		
merits of each.					

Goal AHp – Student is able to Analyze arts and/or literatures in themselves and in relation to specific histories, values, languages, cultures, and technologies.				
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY	
Provides a sophisticated analysis of works of art or literature and a critical assessment of the relationship between them and their specific histories, values, languages, cultures, and/or technologies.	Analyzes the works of art or literature and assesses the relationship between them and their specific histories, values, languages, cultures, and/or technologies.	Satisfactorily presents course material analyzing the works of art or literature and assessing the relationship between them and their specific histories, values, languages, cultures, and/or technologies.	Fails to clearly identify works of art or literature relevant to the course. Does not place the work(s) in a context of their specific histories, values, languages, cultures, and/or technologies.	
Analysis is presented effectively, accurately, and persuasively. Strengths and weaknesses of varying accounts are identified and critically evaluated.	Analysis is generally presented accurately and persuasively. Attention is given to the merits of alternate analyses.	Analysis is satisfactorily supported by course material.	Analysis is absent . Relies on opinion or makes unsubstantiated assertions.	





The **AHq** goal may be met in two distinct families of courses. The criteria relevant to **standard language acquisition courses** at the late-intermediate or early-advanced level are described in the top half of the rubric. The criteria relevant to **courses focused on the subject of language(s)** from a theoretical and historical standpoint are described in the bottom half of the rubric. Courses fulfilling one version of the requirement need not concern themselves with fulfilling the other. In some cases, however, a course may combine elements from both. **- Foreign Language Advisory Committee (FLAC), 19 Dec 2011**

GOAL AHq – Student is able to... Understand the nature of human languages and their speakers.

Student demonstrates an understanding of basic concepts in at least one of the following areas:	OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
standard language acquisition courses a. The essential components of language as a communication system b. How meaning is represented and conveyed in language c. The relationship between speech and writing	Demonstrates a full understanding of language as a system; understands meaning as language-specific. Demonstrates a strong grasp of language-specific idiomatic meanings; does not resort to literal translations. Shows strong awareness and command of language register, from informal exchanges to formal written communication.	and observational skills.	Demonstrates a good sense of the systematic nature of language and of language-based meaning. Demonstrates a good grasp of language-specific idiomatic meanings; usually avoids resorting to literal translations. Shows good awareness and command of language register, from informal exchanges to	and observational skills.
courses focused on the subject of language(s) d. Linguistic diversity and variation across space and time e. The role of speech and writing in culture, society, communication, and discourse	Demonstrates a strong understanding of the relationship between linguistic meaning and the experience, world view, and culture of speakers and analyzes the role of social, historical, and political contexts in the process of linguistic transformation. Demonstrates strong analytical		formal communication (written or oral). Demonstrates good understanding of the relationship between linguistic meaning and the experience, world view, and culture of speakers and assesses the role of social, historical, and political contexts in the process of linguistic transformation. Demonstrates good analytical	Davis 24 of 27

Demonstrates satisfactory sense of the nature of language and of language-based meaning.

Demonstrates **some grasp** of language-specific idiomatic meanings.

Shows some awareness and command of language register, from informal exchanges to formal communication (written or oral).

Demonstrates a **satisfactory understanding** of the relationship between linguistic meaning and the experience, world view, and culture of speakers and of the role of social, historical, and political contexts in the process of linguistic transformation.

Demonstrates some analytical and observational skills.

Does not demonstrate an understanding of the systematic nature of language or language- based meaning.

Demonstrates **no grasp** of language-specific idiomatic meanings; resorts to literal translations.

Shows **no awareness** of language register, from informal exchanges to formal communication (written or oral).

Demonstrates little understanding of the relationship between linguistic meaning and the experience, world view, and/or culture of speakers or the role of social, historical, and political contexts in the process of linguistic transformation.

Does not demonstrate analytical and observational skills.





Areas of Inquiry –

AH: Arts and Humanities (6 credits) - *Students must take* **two** *courses and meet* **two** *of these goals.*

GOAL AHr – Student is able to Engage critically in the process of creative expression.				
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY	
Formulates, critically analyzes, and expertly engages in the creative process in a particular medium.	Fully describes and engages in the creative process in a particular medium.	Satisfactorily describes and engages in a creative process in a particular medium.	Does not effectively engage in a creative process in a particular medium.	
Generates innovative and highly imaginative creative solutions to creative challenges.	Generates imaginative solutions to creative challenges. Provides a critical evaluation of	Effectively applies solutions to creative challenges presented in course materials.	Fails to apply lessons from the course to the creative endeavor. Does not provide critical	
Establishes and applies a clear set of criteria for the critical evaluation of outcomes.	outcomes.	Evaluates outcomes and identifies strategies for improvement.	evaluation of the outcomes.	





Cognitive Skills and Processes -

WCR, WCD: Writing and Communication (9 credits) - Students must take three courses, and meet both WCR and WCD, as follows:

- All students must take **01:355:101 Expository Writing** or its equivalent.
- Students must take **one additional course** (3 or more credits) focused on revision to meet **WCR**:

Communicate complex ideas effectively, in standard written English, to a general audience, and respond effectively to editorial feedback from peers, instructors, &/or supervisors through successive drafts & revision.

• Students must take one additional course (3 or more credits) focused on writing in a specific discipline to meet WCD:

Communicate effectively in modes appropriate to a discipline or area of inquiry; evaluate and critically assess sources and use the conventions of attribution and citation correctly; and analyze and synthesize information and ideas from multiple sources to generate new insights.

* Cases of suspected plagiarism should be reported to the department Undergraduate Chair/Director, and/or Judicial Affairs in the Office of the Dean of Students: http://judicialaffairs.rutgers.edu/





Cognitive Skills and Processes -

WCR, WCD: Writing and Communication (9 credits) - Students must take three courses, and meet both WCR and WCD.

GOAL WCR – Student is able to Communicate complex ideas effectively, in standard written English, to a general audience, and respond effectively to editorial feedback from peers, instructors, &/or supervisors through successive drafts & revision.					
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY		
Presents complex ideas as a clear and compelling argument. Insightful, well-reasoned, and original analysis. Clear, easy to follow organization	Makes a clear argument, based on plausible reasoning. Sustains an argument throughout the analysis. Clear organization. Well-written with only incidental	Presents a satisfactory argument and analysis following the strictures of the course. Satisfactory organization that allows the reader to follow the	Fails to make a cogent argument or to offer sound analysis of any but the simplest ideas. Poorly organized and difficult to follow, impeding meaning.		
with intro, body, and conclusion. Eloquently-written. Appropriate word choices. Free of grammar and spelling mistakes. Demonstrates effective incorporation of constructive	word choice, grammar, or spelling errors. Demonstrates effective incorporation of constructive criticism from peers and instructors in successive drafts.	argument. Writing is satisfactory. Satisfactorily responds to constructive criticism from peers and instructors in successive drafts.	Multiple composition errors that interfere substantially with comprehension. Does not incorporate feedback, or does not submit revised work.		
criticism in successive drafts and evidences self-editing and revision without prompting. Improvement evident in successive drafts resulting in an outstanding final work.	Improvement evident in successive drafts resulting in a good final work.	Improvement evident in successive drafts resulting in a satisfactory final work.	Final work is unsatisfactory.		





Cognitive Skills and Processes -

WCR, WCD: Writing and Communication (9 credits) - Students must take three courses, and meet both WCR and WCD.

GOAL WCD- Student is able to... Communicate effectively in modes appropriate to a discipline or area of inquiry; evaluate and critically assess sources and use the conventions of attribution and citation correctly*; and analyze and synthesize information and ideas from multiple sources to generate new insights.

multiple sources to generate ne	w insights.		
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
Addresses topic at an advanced,	Addresses topic soundly and	Addresses topic and	Does not address topic, or
professional level; communication is well-	effectively; communication is well-	satisfactorily adheres to the	does so in a way that is
argued, effectively presented, and	argued and appropriate to the	format prescribed by the course.	uninformative, inaccurate,
appropriate to the intended audience.	intended audience.	Communication presents a	and/or misleading.
Accurately and effectively employs	Employs relevant discipline-specific	coherent narrative, exposition,	Communication is confusing
relevant discipline-specific format and	format and terminology, largely free	or argument, and an awareness	and contains numerous errors .
terminology, and is free of word-choice,	from word-choice, grammar, spelling	of the intended audience.	Fails to cite sources and apply
grammar, spelling or organizational	or organizational errors .	Satisfactorily cites sources using	appropriate conventions for
errors.	Cites clearly relevant sources. Applies	appropriate conventions for	citation and attribution.*
Cites a comprehensive range of relevant	appropriate conventions for	attribution and citation.*	Fails to provide evaluation and
sources, and accurately applies	attribution and citation.*	Provides satisfactory evaluation	assessment of evidence,
appropriate conventions for attribution	Provides strong evaluation and	and assessment of evidence,	arguments, and counter-
and citation.*	critical assessment of evidence,	arguments, and counter-	arguments drawn from
Provides sophisticated evaluation and	arguments, and counter-arguments	arguments drawn from multiple	sources.
critical assessment of evidence,	drawn from multiple sources.	sources. Satisfactorily	Little or no attention to
arguments, and counter-arguments	Successfully uses this analysis in	incorporates this material.	implications, connections, or
drawn from multiple sources. Artfully	advancing thesis or placing hypothesis	Notes implications, connections,	limits of findings.
uses this analysis in advancing thesis or	testing in context.	and limits of findings.	illines or illianigs.
placing hypothesis testing in appropriate	Explores larger implications and	and mines or minenger	
context.	connections; demonstrates critical		
Insightfully explores larger implications	thinking; identifies limits of findings.		
and connections; demonstrates original			
thinking; explicates limits of findings.			





Cognitive Skills and Processes –

QQ, QR: Quantitative and Formal Reasoning (6 credits) - *Students must take two courses and meet both of these goals.*

If using specific objective questions identified for each goal, the instructor may set the benchmarks for each rating as appropriate to the course and the discipline. For example, a typical benchmarking is laid out here:

90% or more correct	80%-89% correct	70%-79% correct	69% or less correct

GOAL QQ – Student is able to Form	mulate, evaluate, and communicate	conclusions and inferences from qua	ntitative information.
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
Effective and insightful selection and presentation of a range of quantitative information. Formulates well-justified conclusions/inferences from the data at a high level of specificity and sophistication. Engages in extensively critical analysis of the conclusions/inferences including discussion of tests of validity and scope. Presentation is analytically precise, persuasive, and thorough.	Appropriate selection and presentation of relevant quantitative information. Draws a reasonably-justified conclusion/inference from the data. Identifies basic strengths and weaknesses of the conclusions/inferences noting concerns about validity and scope. Clearly and correctly presents conclusions and inferences.	Satisfactory selection and presentation of relevant quantitative information in adherence with standards conveyed in the course. Draws conclusions/inferences from the data, noting appropriate concerns about validity and scope. Satisfactorily presents conclusions and inferences.	Fails to select and present relevant quantitative information in adherence with standards conveyed in the course. Fails to draw, or critically assess, logical conclusions/inferences from the quantitative information.





GOAL QR- Student is able to Apply effective and efficient mathematical or other formal processes to reason and to solve problems.				
	OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
Symbolization: The ability to convert a problem into a setting using symbolic terminology	Describes the relevant quantities or variables in the problem. Labels all the relevant quantities in the problem; uses the area's mathematical/symbolic terminology correctly.	Labels all the relevant quantities in the problem; uses the area's mathematical/symbolic terminology correctly.	Satisfactorily labels all the relevant quantities in the problem; uses the area's mathematical/symbolic terminology correctly.	Fails to label all the relevant quantities in the problem or uses the area's mathematical/symbolic terminology incorrectly.
Relationships: The ability to connect quantities and find relationships among symbolic quantities	Verbally connects quantities and finds relationships among symbolic quantities. Provides complete and accurate visual representations of relationships among symbolic quantities that reveal key relationships.	Provides complete and accurate visual representations of relationships among symbolic quantities that reveal key relationships.	Provides satisfactory visual representations of relationships among symbolic quantities that reveal key relationships in accord with specific course directives.	Uses irrelevant information in trying to set up the problem; relies on visual representations that are misleading; neglects fundamental connections and relationships.
Formulation: The ability to construct an appropriate symbolic framework	Structures the problem in a novel way or selection shows a sophisticated understanding of relevant conventional frameworks.	Identifies a relevant conventional framework for the problem.	Satisfactorily adopts a relevant conventional framework for the problem from the course materials.	Fails to employ a symbolic framework for the problem.
Analysis: The ability to carry out algorithmic and logical procedures to resolution	Elegantly carries out a logical sequence of algorithms and procedures; uses symbolic operational rules and performs computational steps correctly.	Carries out a logical sequence of algorithms and procedures; uses symbolic operational rules and performs computational steps correctly.	Satisfactorily carries out a logical sequence of algorithms and procedures; uses symbolic operational rules.	Fails to follow an appropriate algorithm or mathematical procedure to completion; makes serious computational errors.
Interpretation: The ability to draw valid conclusions from numeric/symbolic evidence	Draws insightful, valid, well- stated, and well-justified conclusions from the symbolic/numeric solution.	Draws valid clear and reasonably-justified conclusions from the symbolic/numeric solution.	Satisfactorily draws valid conclusions from the symbolic/numeric solution.	Fails to draws conclusions from the symbolic/numeric solution.