



CC: Contemporary Challenges (6 credits) - Students must take *two* courses that meet *one or more* of these goals (a, b, c, d).

GOAL a - Student is able to... Analyze the degree to which forms of human difference shape a person’s experiences of and perspectives on contemporary issues.			
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
<p>Specifically explicates links between multiple types of human difference and individuals’ or groups’ experiences of and perspectives on contemporary issues.</p> <p>Evidences a sophisticated understanding of those differences and their effects on a contemporary challenge.</p>	<p>Examines links between some types of human difference relevant to the course and individuals’ or groups’ experiences and perspectives on contemporary issues.</p> <p>Demonstrates an understanding of some effect(s) of those differences on a contemporary challenge.</p>	<p>Identifies links between human differences relevant to the course and individuals’ or groups’ experiences and perspectives on contemporary issues, largely through satisfactory presentation of course materials.</p> <p>Demonstrates some understanding of how some differences affect a contemporary challenge.</p>	<p>Fails to link significant forms of human difference relevant to the course to individuals’ or groups’ experiences of and perspectives on contemporary issues as relevant to focus of the particular course.</p> <p>Fails to delineate the impact of differences on the issues that are central to the course.</p>

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



GOAL c - Student is able to... Analyze the relationship that science and technology have to a contemporary social issue.

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



GOAL d - Student is able to... Analyze contemporary issues of social justice.

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



Areas of Inquiry –

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

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

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

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 & SCL: Social and Historical Analysis (6 credits) - *Students must take **two** courses and meet **both HST and SCL**, as follows:*

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

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



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

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



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

GOAL m - <i>Student is able to...</i> Understand different theories about human culture, social identity, economic entities, political systems, and other forms of social organization.			
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
<p>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.</p> <p>Compares and critiques theoretical approaches; addresses their respective strengths and weaknesses; and, suggests possible extensions of analysis in new directions.</p>	<p>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.</p> <p>Identifies strengths and weaknesses of each theoretical approach; and, discusses its application to a particular case.</p>	<p>Satisfactorily discusses theories addressed in the course materials about human culture, social identity, economic entities, political systems, or other forms of social organization.</p> <p>Identifies different possible theoretical approaches to a particular case.</p>	<p>Fails to satisfactorily discuss any theory about human culture, social identity, economic entities, political systems, or other forms of social organization.</p> <p>Does not discuss variations in perspective or theory in relation to the subject.</p>



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

GOAL n - Student is able to... Employ tools of social scientific reasoning to study particular questions or situations, using appropriate assumptions, methods, evidence, and arguments.			
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
<p>Demonstrates an advanced understanding of a range of concepts about human and social behavior and applies them to particular questions or situations with skill.</p> <p>Considers the strengths and weaknesses of the concepts applied, and suggests possible extensions of the analysis in new directions.</p> <p>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.</p> <p>Demonstrates ability to conduct independent analysis as well as critically analyzed that of other scholars.</p>	<p>Clearly explains and applies concepts about human and social behavior in the context of applying them to particular questions or situations.</p> <p>Considers the strengths and weaknesses of the concepts applied.</p> <p>Identifies and explains relationships among assumptions, method, evidence, arguments, and theory in given cases of social and social analysis.</p> <p>Demonstrates ability to critically evaluate other scholars' analysis.</p>	<p>Satisfactorily recounts the application of concepts about human and social behavior presented in the course materials.</p> <p>Makes some assessment of the relative strengths of the concepts applied.</p> <p>Satisfactorily outlines relationships among assumptions, method, evidence, arguments, and theory in scientific analysis.</p> <p>Demonstrates ability to make some critical evaluations of other scholars' analysis.</p>	<p>Fails to describe or apply concepts about human and social behavior to particular questions or situations.</p> <p>Fails to identify relationships among assumptions, method, evidence, arguments, and theory in social and social analysis.</p> <p>No apparent ability to critically evaluate other scholars' analysis.</p>



Areas of Inquiry –

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

AHo

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

AHp

Goal p – 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
<p>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.</p> <p>Analysis is presented effectively, accurately, and persuasively. Strengths and weaknesses of varying accounts are identified and critically evaluated.</p>	<p>Analyzes the works of art or literature and assesses the relationship between them and their specific histories, values, languages, cultures, and/or technologies.</p> <p>Analysis is generally presented accurately and persuasively. Attention is given to the merits of alternate analyses.</p>	<p>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.</p> <p>Analysis is satisfactorily supported by course material.</p>	<p>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.</p> <p>Analysis is absent. Relies on opinion or makes unsubstantiated assertions.</p>



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**

AHq

GOAL q – Student is able to... Understand the nature of human languages and their speakers.				
<i>Student demonstrates an understanding of basic concepts in at least one of the following areas:</i>	OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
<p>standard language acquisition courses</p> <p>a. <i>The essential components of language as a communication system</i></p> <p>b. <i>How meaning is represented and conveyed in language</i></p> <p>c. <i>The relationship between speech and writing</i></p>	<p>Demonstrates a full understanding of language as a system; understands meaning as language-specific.</p> <p>Demonstrates a strong grasp of language-specific idiomatic meanings; does not resort to literal translations.</p> <p>Shows strong awareness and command of language register, from informal exchanges to formal written communication.</p>	<p>Demonstrates a good sense of the systematic nature of language and of language-based meaning.</p> <p>Demonstrates a good grasp of language-specific idiomatic meanings; usually avoids resorting to literal translations.</p> <p>Shows good awareness and command of language register, from informal exchanges to formal communication (written or oral).</p>	<p>Demonstrates satisfactory sense of the nature of language and of language-based meaning.</p> <p>Demonstrates some grasp of language-specific idiomatic meanings.</p> <p>Shows some awareness and command of language register, from informal exchanges to formal communication (written or oral).</p>	<p>Does not demonstrate an understanding of the systematic nature of language or language-based meaning.</p> <p>Demonstrates no grasp of language-specific idiomatic meanings; resorts to literal translations.</p> <p>Shows no awareness of language register, from informal exchanges to formal communication (written or oral).</p>
<p>courses focused on the subject of language(s)</p> <p>d. <i>Linguistic diversity and variation across space and time</i></p> <p>e. <i>The role of speech and writing in culture, society, communication, and discourse</i></p>	<p>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.</p> <p>Demonstrates strong analytical and observational skills.</p>	<p>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.</p> <p>Demonstrates good analytical and observational skills.</p>	<p>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.</p> <p>Demonstrates some analytical and observational skills.</p>	<p>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.</p> <p>Does not demonstrate analytical and observational skills.</p>



AHr

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



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** (goal s):*
 - s. 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** (goal t):*
 - t. 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.

WCR

GOAL s2 – 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
<p>Presents complex ideas as a clear and compelling argument. Insightful, well-reasoned, and original analysis.</p> <p>Clear, easy to follow organization with intro, body, and conclusion.</p> <p>Eloquently-written. Appropriate word choices. Free of grammar and spelling mistakes.</p> <p>Demonstrates effective incorporation of constructive criticism in successive drafts and evidences self-editing and revision without prompting.</p> <p>Improvement evident in successive drafts resulting in an outstanding final work.</p>	<p>Makes a clear argument, based on plausible reasoning. Sustains an argument throughout the analysis.</p> <p>Clear organization.</p> <p>Well-written with only incidental word choice, grammar, or spelling errors.</p> <p>Demonstrates effective incorporation of constructive criticism from peers and instructors in successive drafts.</p> <p>Improvement evident in successive drafts resulting in a good final work.</p>	<p>Presents a satisfactory argument and analysis following the strictures of the course.</p> <p>Satisfactory organization that allows the reader to follow the argument.</p> <p>Writing is satisfactory.</p> <p>Satisfactorily responds to constructive criticism from peers and instructors in successive drafts.</p> <p>Improvement evident in successive drafts resulting in a satisfactory final work.</p>	<p>Fails to make a cogent argument or to offer sound analysis of any but the simplest ideas.</p> <p>Poorly organized and difficult to follow, impeding meaning.</p> <p>Multiple composition errors that interfere substantially with comprehension.</p> <p>Does not incorporate feedback, or does not submit revised work.</p> <p>Final work is unsatisfactory.</p>

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WCD

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



Cognitive Skills and Processes –

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

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
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QQ

GOAL w – Student is able to... Formulate, evaluate, and communicate conclusions and inferences from quantitative information.

OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
<p>Effective and insightful selection and presentation of a range of quantitative information.</p> <p>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.</p> <p>Presentation is analytically precise, persuasive, and thorough.</p>	<p>Appropriate selection and presentation of relevant quantitative information.</p> <p>Draws a reasonably-justified conclusion/inference from the data.</p> <p>Identifies basic strengths and weaknesses of the conclusions/inferences noting concerns about validity and scope.</p> <p>Clearly and correctly presents conclusions and inferences.</p>	<p>Satisfactory selection and presentation of relevant quantitative information in adherence with standards conveyed in the course.</p> <p>Draws conclusions/inferences from the data, noting appropriate concerns about validity and scope.</p> <p>Satisfactorily presents conclusions and inferences.</p>	<p>Fails to select and present relevant quantitative information in adherence with standards conveyed in the course.</p> <p>Fails to draw, or critically assess, logical conclusions/inferences from the quantitative information.</p>



QR

GOAL x – 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 draw conclusions from the symbolic/numeric solution.



Cognitive Skills and Processes –

ITR: Information Technology and Research (3 credits) - Students must take one course that meet one or both of these goals (y, aa)

GOAL y – Student is able to... Employ current technologies to access and evaluate information, to conduct research, and to communicate findings. [“conduct research” includes data generation]			
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
<p>Skillfully employs technologies to access information, research an issue or test a hypothesis, and communicate findings and makes effective and efficient choices.</p> <p>Thoroughly and skillfully assesses the credibility, relevance, and value (significance) of information or source of information.</p> <p>Demonstrates a sophisticated understanding of the strengths and limitations of a particular technology (or methodology the technology allows). Correctly identifies what types of problems or tasks it is suited to and which it is not, and why.</p> <p>When assessing statistical and scientific research, applies standards of replicability, falsifiability, and generalizability.</p>	<p>Efficiently employs appropriate technologies to access information, research an issue or test a hypothesis, and communicate findings.</p> <p>Critically assesses the credibility, relevance, and value (significance) of information or source of information.</p> <p>Identifies the strengths and limitations of a particular technology (or methodology the technology allows). Correctly identifies what types of problems or tasks it is suited to and which it is not.</p> <p>When assessing statistical and scientific research, identifies standards of replicability, falsifiability, and generalizability.</p>	<p>Satisfactorily employs appropriate technologies to access information, research an issue or test a hypothesis, and communicate findings as directed by the course.</p> <p>Satisfactorily assesses the credibility, relevance, and value (significance) of information or source of information.</p> <p>Satisfactorily recounts the strengths and limitations of a particular technology (or methodology the technology allows). Satisfactorily identifies what types of problems or tasks it is suited to and which it is not.</p> <p>When using statistical and scientific research, satisfactorily identifies standards of replicability, falsifiability, and generalizability.</p>	<p>Does not employ appropriate technologies to access information, research an issue or test a hypothesis, and communicate findings.</p> <p>Fails to assess the credibility, relevance, and value (significance) of information or source of information.</p> <p>Cannot identify the strengths and limitations of a particular technology (or methodology the technology allows) nor identify what types of problems or tasks it is suited to and which it is not.</p> <p>When invoking statistical and scientific research, fails to identify standards of replicability, falsifiability, and generalizability.</p>



ITR: Information Technology and Research (3 credits) - Students must take one course that meet one or both of these goals (y, aa)

Goal aa – Student is able to... Understand the principles that underlie information systems. [“information systems” may include technological, biological, and social systems]			
OUTSTANDING	GOOD	SATISFACTORY	UNSATISFACTORY
<p>Fully describes principles employed in organizing and storing data and information by different systems (may include technological, biological, and social systems).</p> <p>Provides a sophisticated discussion of the implications of different organizational principles used by information systems for access to and accessibility of information, and the personal and social issues raised.</p>	<p>Describes principles employed in organizing and storing data and information by different systems (may include technological, biological, and social systems).</p> <p>Discusses some implications of different organizational principles used by information systems for access to and accessibility of information, and the personal and social issues raised.</p>	<p>Satisfactorily describes principles employed in organizing and storing data and information by at least one system (may include technological, biological, or social systems).</p> <p>Identifies implications of a set of organizational principles used by an information system for access to and accessibility of information, and the personal and social issues raised.</p>	<p>Does not describe principles employed in organizing and storing data and information by at least one system.</p> <p>Fails to identify implications of a set of organizational principles used by an information system for access to and accessibility of information, and the personal and social issues raised.</p>

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