

2011-2012 UK Core Assessment: Inquiry

Overview of Assessment

- Artifacts were gathered from the following areas offered in Fall 2011 (Appendix A):
 - Arts & Creativity – 11 courses with 71 total sections
 - Humanities – 25 courses with 117 total sections
 - Natural, Physical, and Mathematical Sciences – 10 courses with 63 total sections
 - Social Sciences – 6 courses and 105 total sections
- For each area, the faculty evaluators used an area-specific rubric (Appendix B) to complete 798 total evaluations on General Education Learning Outcome 1: Students will demonstrate an understanding of and ability to employ the processes of intellectual inquiry.
- All evaluations took place using the Blackboard Artifact Assessment process on the following days:
 - Arts & Creativity – May 11, 2012 (4 faculty evaluators)
 - Humanities – May 10, 2012 (10 faculty evaluators)
 - Natural, Physical, and Mathematical Sciences – May 9, 2012 (8 faculty evaluators)
 - Social Sciences – May 10, 2012 (7 faculty evaluators)

Inquiry Scores

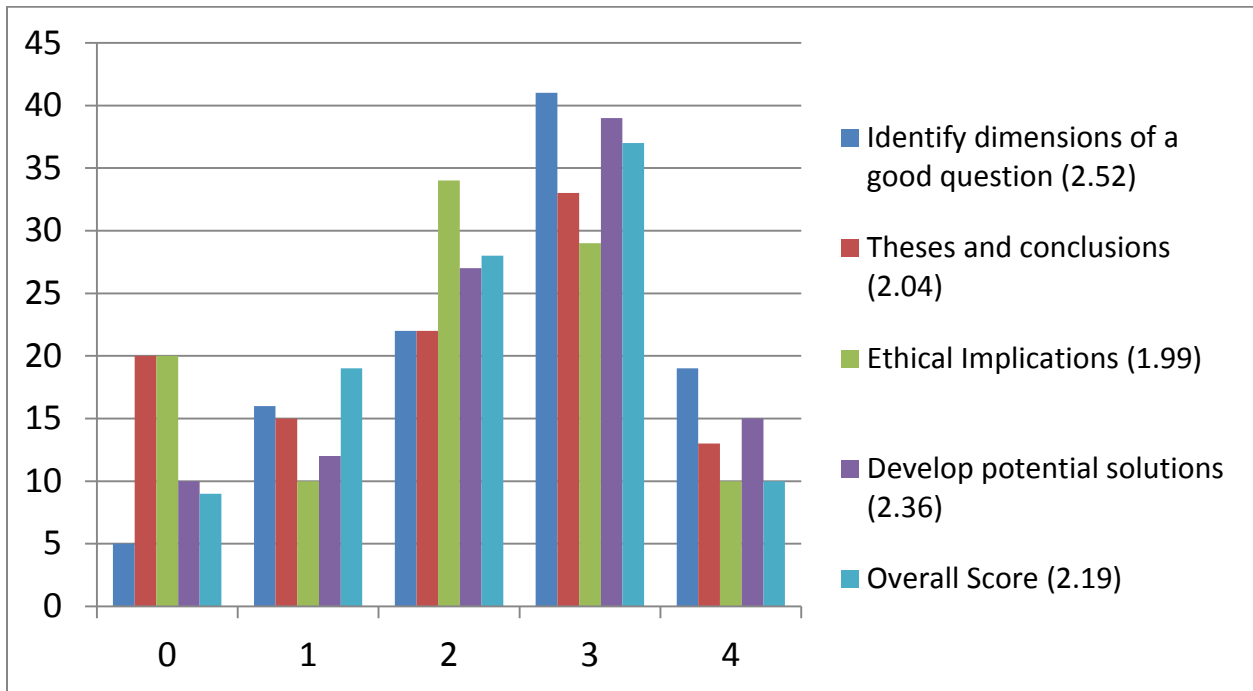
Artifacts (student assignments) were scored using the rubric on a scale of 0-4, with 4 representing the highest level of performance and 0 being the lowest level. All accessible artifacts (those which could be opened by evaluators for scoring in Blackboard) were scored at least once. Approximately ten percent of the artifacts were distributed to multiple evaluators for additional scoring. This over-sampling was to estimate the inter-rater reliability of the evaluators. Artifacts were scored using a hybrid method which assigns both an overall score to the given artifact (holistic) as well as individual scores to particular subcategories as defines by the rubric (analytic).

This report will state the frequency of all scores, regardless of the agreement or disagreement of those artifacts that were evaluated multiple times.

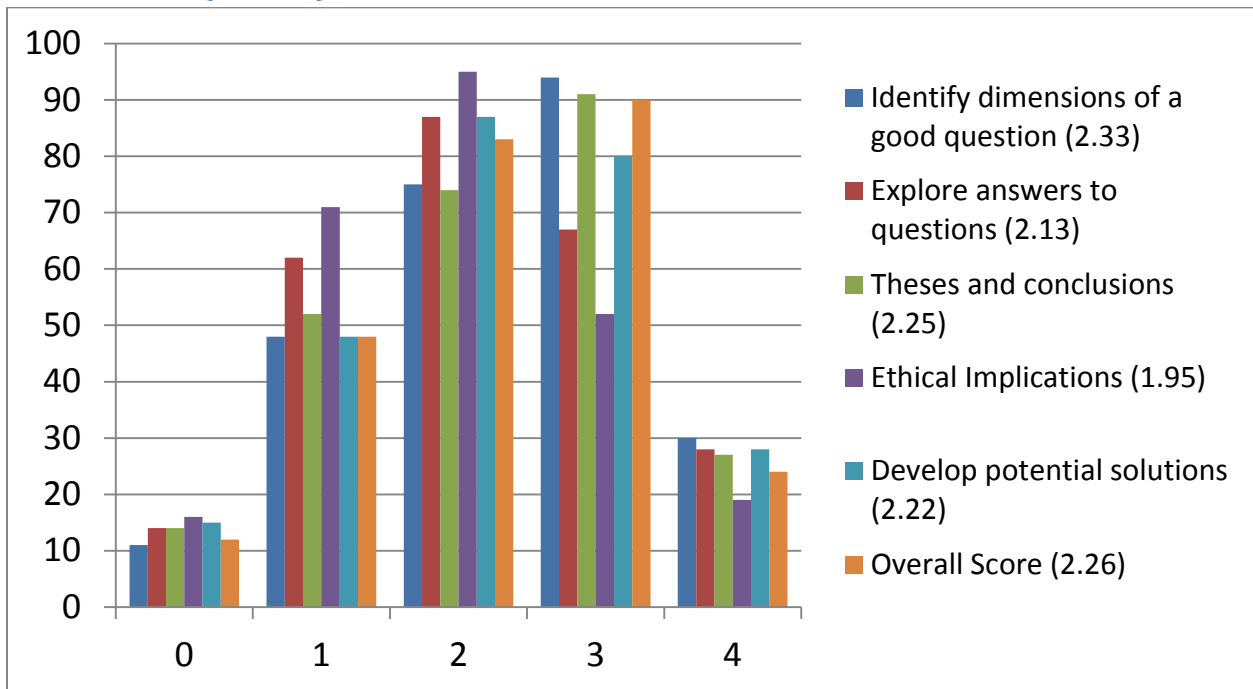
Area	N	Overall Score Mean	sd	% at 2 or better
Arts & Creativity	103	2.19	1.12	72.8
Humanities	257	2.26	1.02	76.7
Natural/ Physical/Mathematical Sciences	263	0.43	0.79	13.7
Social Sciences	175	1.56	0.85	48.0

The following charts break down area-specific scores to include the analytic scoring results.

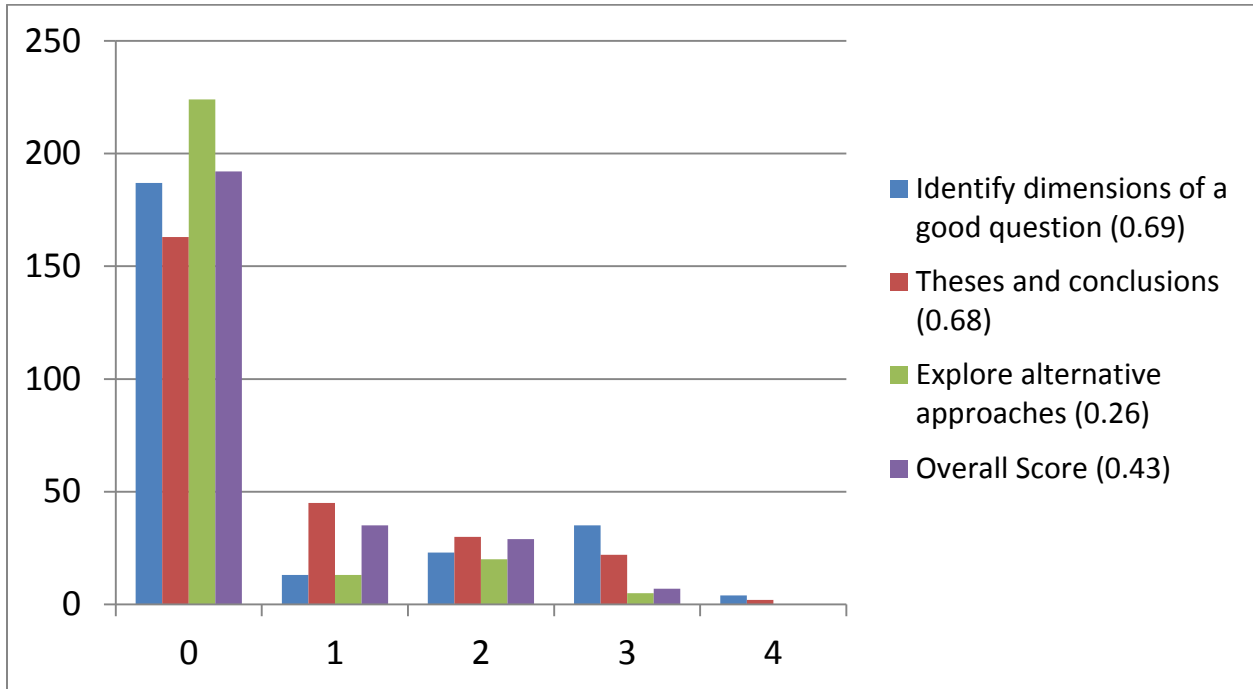
Arts & Creativity (n=103)



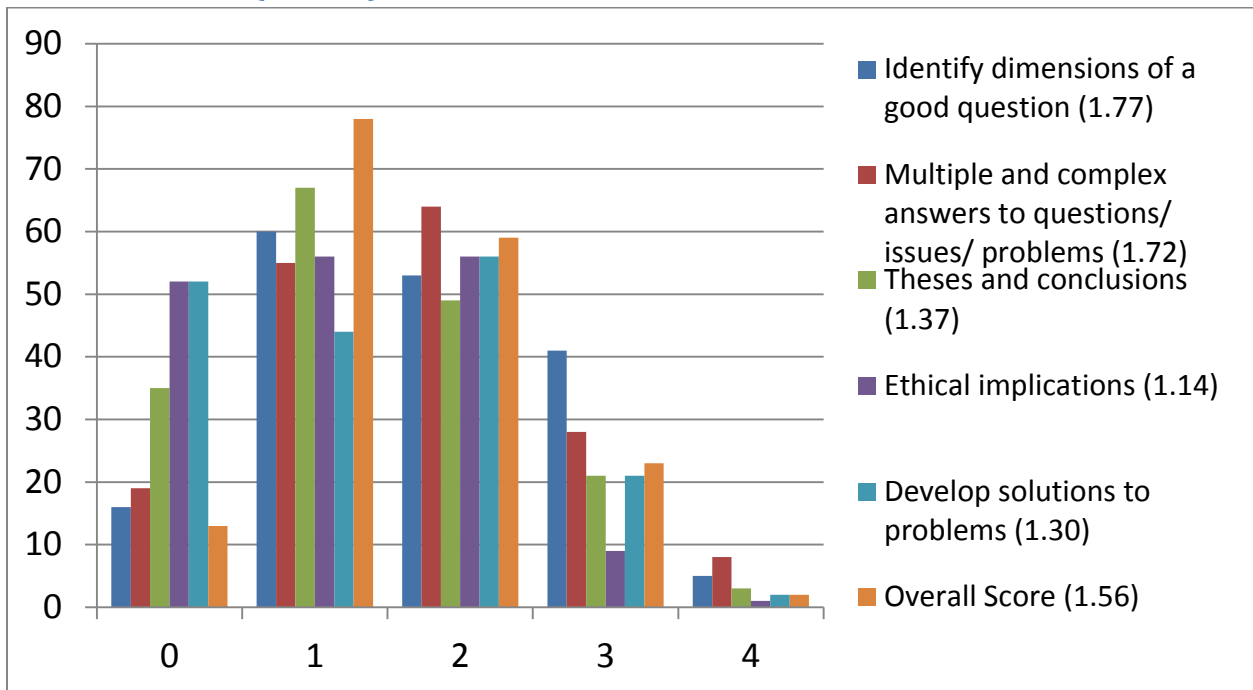
Humanities (n=258)



Natural, Physical, Mathematical Sciences (n=263)



Social Sciences (n=175)



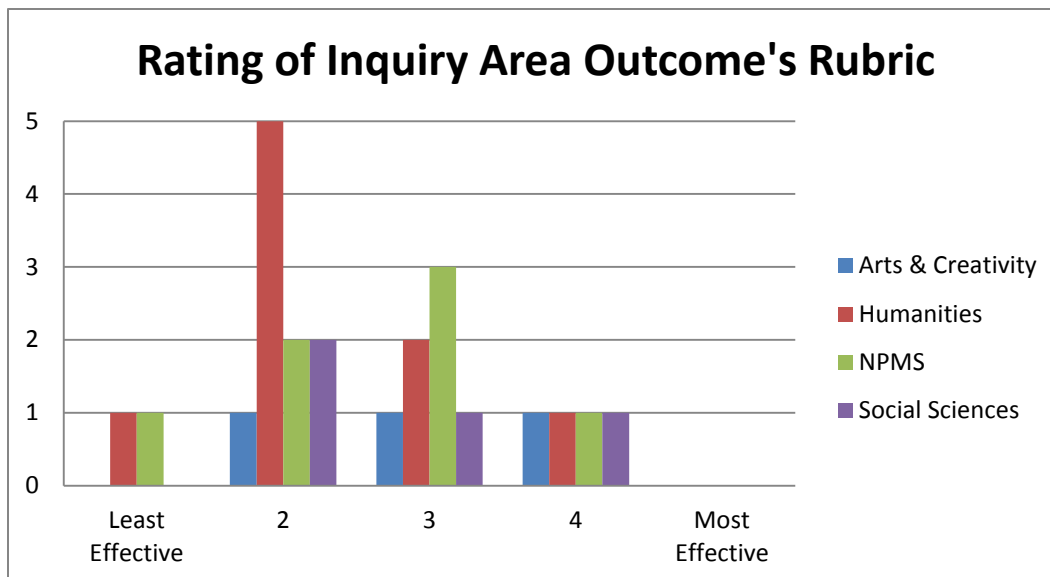
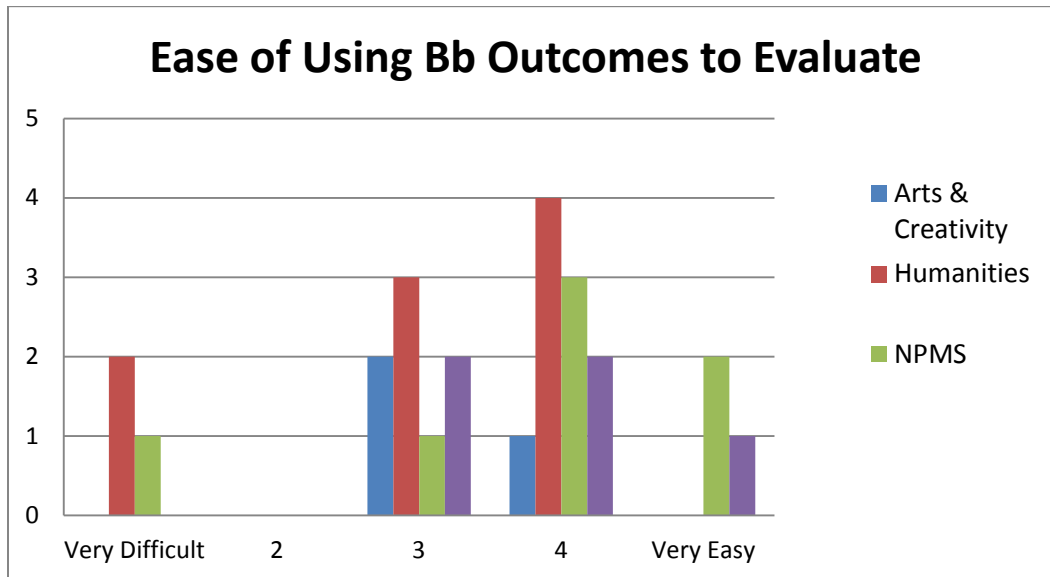
Monitoring the Evaluation Process

All evaluations took place using the Blackboard assessment system. The evaluators for each area were gathered and normed between May 9 - 11, 2012. During the norming process, evaluators read and scored a minimum of three artifacts, and were asked to discuss their rationale for evaluating these artifacts. Evaluators were deemed to be “normed” when the group came to an agreement on the overall score on each of the area-specific assignments being reviewed. Assignments that were scored twice were considered to be “in agreement” when the scores were within one point of each other.

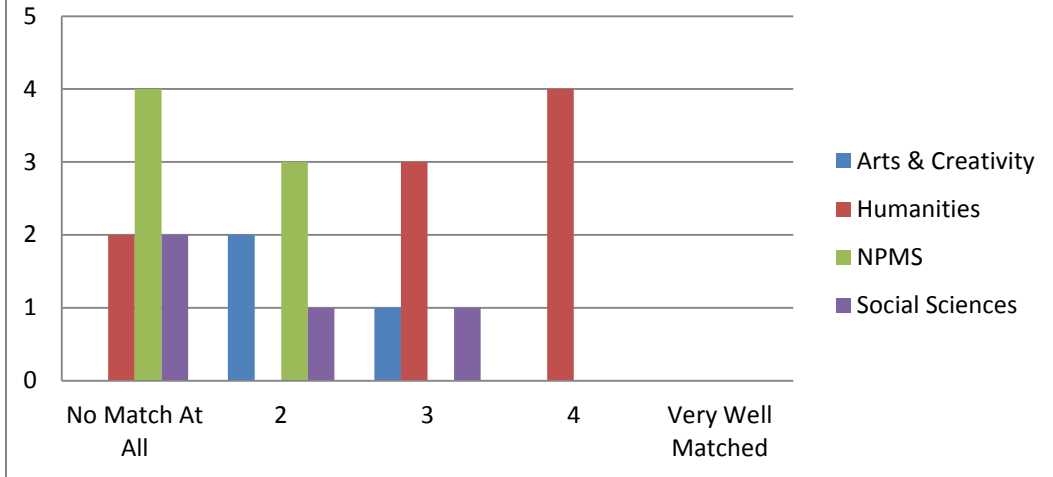
Area	Total assignments scored	Assignments scored twice	% inter-rater agreement
Arts & Creativity	103	9	77.8
Humanities	257	20	80.0
NPMS	263	47	83.0
Social Sciences	175	13	84.6

Evaluator Feedback

After evaluations were completed, all evaluators were sent a survey using an email distribution list. The survey (Appendix C) asked evaluators to provide feedback on the assessment process, the quality of the rubric, and the quality of the students' work. Overall, 24 out of 29 evaluators responded to the survey resulting in a response rate of 83%. Some selected responses are included below (see Appendix C) for area-specific feedback.



Matching of Assignments to Rubric



Summary of Key Findings

Of the assignments collected, 72.8% of the Arts & Creativity, 76.7% of the Humanities, 13.7% of the NPMS, and 48% of the Social Sciences scored at or above a 2 rating (which is considered "competent") for the overall score. A considerable issue in this assessment cycle, especially for the NPMS and Social Science areas, was that the rubrics by which the assignments were evaluated were not available to faculty until after the collection process had concluded. By making these available well in advance to faculty in the future it should help ensure the assignments are an appropriate reflection of the outcome areas being assessed. In turn, this should improve the scores overall and ensure more congruency between assignment and rubric content. In addition, all areas evaluated were greater than 78% for inter-rater agreement indicating that the norming process was effective and there was considerable consistency between evaluators. It will be important to communicate the assessment results back to the campus community and, especially, the UK Core teaching faculty. Finally, the rubrics should be reviewed and revised, as appropriate, based on the feedback given here by the evaluators. This cycle represented the first time the rubrics have been available and utilized therefore it's important that they evolve as necessary.

Appendix A – Inquiry Courses and Sections Providing Assignment Information

UK CORE AREA	COURSE	SECTION	TITLE
ARTS AND CREATIVITY	A-E 120	SECTION 001	PATHWAYS TO CREATIVITY IN THE VISUAL ART
ARTS AND CREATIVITY	A-E 120	SECTION 002	PATHWAYS TO CREATIVITY IN THE VISUAL ART
ARTS AND CREATIVITY	A-E 120	SECTION 003	PATHWAYS TO CREATIVITY IN THE VISUAL ART
ARTS AND CREATIVITY	A-E 120	SECTION 004	PATHWAYS TO CREATIVITY IN THE VISUAL ART
ARTS AND CREATIVITY	A-E 120	SECTION 005	PATHWAYS TO CREATIVITY IN THE VISUAL ART
ARTS AND CREATIVITY	A-E 120	SECTION 401	PATHWAYS TO CREATIVITY IN THE VISUAL ART
ARTS AND CREATIVITY	A-S 102	SECTION 001	TWO-DIMENSIONAL SURFACE
ARTS AND CREATIVITY	A-S 102	SECTION 002	TWO-DIMENSIONAL SURFACE
ARTS AND CREATIVITY	A-S 102	SECTION 003	TWO-DIMENSIONAL SURFACE
ARTS AND CREATIVITY	A-S 102	SECTION 004	TWO-DIMENSIONAL SURFACE
ARTS AND CREATIVITY	A-S 102	SECTION 005	TWO-DIMENSIONAL SURFACE
ARTS AND CREATIVITY	A-S 102	SECTION 401	TWO-DIMENSIONAL SURFACE
ARTS AND CREATIVITY	A-S 102	SECTION 402	TWO-DIMENSIONAL SURFACE
ARTS AND CREATIVITY	A-S 103	SECTION 001	THREE-DIMENSIONAL FORM
ARTS AND CREATIVITY	A-S 103	SECTION 002	THREE-DIMENSIONAL FORM
ARTS AND CREATIVITY	A-S 103	SECTION 401	THREE-DIMENSIONAL FORM
ARTS AND CREATIVITY	A-S 130	SECTION 001	DRAWING
ARTS AND CREATIVITY	A-S 130	SECTION 002	DRAWING
ARTS AND CREATIVITY	A-S 130	SECTION 003	DRAWING
ARTS AND CREATIVITY	A-S 130	SECTION 004	DRAWING
ARTS AND CREATIVITY	A-S 130	SECTION 005	DRAWING
ARTS AND CREATIVITY	A-S 130	SECTION 401	DRAWING
ARTS AND CREATIVITY	A-S 200	SECTION 001	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 002	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 003	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 004	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 005	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 006	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 007	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 008	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 009	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 010	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 401	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 402	DIGITAL ART SPACE TIME

ARTS AND CREATIVITY	A-S 200	SECTION 403	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 404	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 200	SECTION 405	DIGITAL ART SPACE TIME
ARTS AND CREATIVITY	A-S 280	SECTION 001	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 002	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 003	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 004	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 005	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 006	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 007	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 008	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 401	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 402	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 403	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 280	SECTION 404	INTRO PHOTOGRAPHIC LITERACY
ARTS AND CREATIVITY	A-S 380	SECTION 001	PHOTOGRAPHY I
ARTS AND CREATIVITY	A-S 380	SECTION 002	PHOTOGRAPHY I
ARTS AND CREATIVITY	A-S 380	SECTION 003	PHOTOGRAPHY I
ARTS AND CREATIVITY	A-S 380	SECTION 005	PHOTOGRAPHY I
ARTS AND CREATIVITY	A-S 380	SECTION 401	PHOTOGRAPHY I
ARTS AND CREATIVITY	CME 455	SECTION 001	CHEMICAL ENGINEERING PROCESS DESIGN I
ARTS AND CREATIVITY	CME 455	SECTION 002	CHEMICAL ENGINEERING PROCESS DESIGN I
ARTS AND CREATIVITY	TA 110	SECTION 001	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 002	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 003	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 004	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 005	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 006	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 007	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 008	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 009	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 010	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 011	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 110	SECTION 012	THEATRE: AN INTRODUCTION
ARTS AND CREATIVITY	TA 120	SECTION 001	CREATIVITY & ART OF ACTING
ARTS AND CREATIVITY	TA 140	SECTION 001	INTRO TO DANCE
ARTS AND CREATIVITY	TA 140	SECTION 002	INTRO TO DANCE
HUMANITIES	AAS 264	SECTION 001	MAJOR BLACK WRITERS
HUMANITIES	AAS 264	SECTION 002	MAJOR BLACK WRITERS

HUMANITIES	AAS 264	SECTION 003	MAJOR BLACK WRITERS
HUMANITIES	A-H 101	SECTION 001	INTRODUCTION TO VISUAL ARTS
HUMANITIES	A-H 105	SECTION 001	ANCIENT - MEDIEVAL ART
HUMANITIES	A-H 105	SECTION 002	ANCIENT - MEDIEVAL ART
HUMANITIES	A-H 106	SECTION 001	RENAISSANCE - MODERN ART
HUMANITIES	A-H 106	SECTION 002	RENAISSANCE - MODERN ART
HUMANITIES	A-H 106	SECTION 003	RENAISSANCE - MODERN ART
HUMANITIES	A-H 106	SECTION 401	RENAISSANCE - MODERN ART
HUMANITIES	A-H 334	SECTION 001	STDS RENAISSANCE ART: REFRAME RENSSANCE
HUMANITIES	ARC 314	SECTION 001	HIS & THEORY III: 20TH CENT&CONTEMPORARY
HUMANITIES	CLA 135	SECTION 001	GREEK/ROMAN MYTHOLOGY
HUMANITIES	CLA 135	SECTION 002	GREEK/ROMAN MYTHOLOGY
HUMANITIES	CLA 135	SECTION 003	GREEK/ROMAN MYTHOLOGY
HUMANITIES	CLA 135	SECTION 004	GREEK/ROMAN MYTHOLOGY
HUMANITIES	CLA 135	SECTION 005	GREEK/ROMAN MYTHOLOGY
HUMANITIES	CLA 135	SECTION 016	GREEK/ROMAN MYTHOLOGY
HUMANITIES	CLA 135	SECTION 017	GREEK/ROMAN MYTHOLOGY
HUMANITIES	CLA 135	SECTION 018	GREEK/ROMAN MYTHOLOGY
HUMANITIES	CLA 135	SECTION 019	GREEK/ROMAN MYTHOLOGY
HUMANITIES	CLA 135	SECTION 020	GREEK/ROMAN MYTHOLOGY
HUMANITIES	ENG 191	SECTION 001	LITERATURE AND THE ARTS OF CITIZENSHIP
HUMANITIES	ENG 230	SECTION 003	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 004	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 005	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 006	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 007	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 008	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 009	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 010	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 011	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 012	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 013	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 014	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 015	INTRO TO LIT
HUMANITIES	ENG 230	SECTION 016	INTRO TO LIT
HUMANITIES	ENG 234	SECTION 001	INTRO TO WOMEN'S LIT
HUMANITIES	ENG 234	SECTION 002	INTRO TO WOMEN'S LIT
HUMANITIES	ENG 234	SECTION 003	INTRO TO WOMEN'S LIT
HUMANITIES	ENG 264	SECTION 001	MAJOR BLACK WRITERS

HUMANITIES	ENG 264	SECTION 002	MAJOR BLACK WRITERS
HUMANITIES	ENG 264	SECTION 003	MAJOR BLACK WRITERS
HUMANITIES	ENG 264	SECTION 401	MAJOR BLACK WRITERS
HUMANITIES	ENG 264	SECTION 402	MAJOR BLACK WRITERS
HUMANITIES	ENG 281	SECTION 001	INTRODUCTION TO FILM
HUMANITIES	ENG 281	SECTION 002	INTRODUCTION TO FILM
HUMANITIES	ENG 281	SECTION 003	INTRODUCTION TO FILM
HUMANITIES	ENG 281	SECTION 004	INTRODUCTION TO FILM
HUMANITIES	ENG 281	SECTION 401	INTRODUCTION TO FILM
HUMANITIES	FR 103	SECTION 001	FRENCH FILM
HUMANITIES	FR 103	SECTION 002	FRENCH FILM
HUMANITIES	FR 103	SECTION 003	FRENCH FILM
HUMANITIES	FR 103	SECTION 004	FRENCH FILM
HUMANITIES	FR 103	SECTION 005	FRENCH FILM
HUMANITIES	GER 105	SECTION 001	GERMAN FILM TODAY
HUMANITIES	GER 105	SECTION 002	GERMAN FILM TODAY
HUMANITIES	GER 105	SECTION 002	GERMAN FILM TODAY
HUMANITIES	GER 105	SECTION 003	GERMAN FILM TODAY
HUMANITIES	GER 105	SECTION 004	GERMAN FILM TODAY
HUMANITIES	GER 105	SECTION 005	GERMAN FILM TODAY
HUMANITIES	GWS 201	SECTION 001	INTRO GWS ARTS/ HUMANITIES
HUMANITIES	GWS 201	SECTION 002	INTRO GWS ARTS/ HUMANITIES
HUMANITIES	GWS 201	SECTION 003	INTRO GWS ARTS/ HUMANITIES
HUMANITIES	GWS 201	SECTION 004	INTRO GWS ARTS/ HUMANITIES
HUMANITIES	GWS 201	SECTION 005	INTRO GWS ARTS/ HUMANITIES
HUMANITIES	HIS 104	SECTION 001	HIS EUR THRU MID-17 CENT
HUMANITIES	HIS 104	SECTION 002	HIS EUR THRU MID-17 CENT
HUMANITIES	HIS 104	SECTION 003	HIS EUR THRU MID-17 CENT
HUMANITIES	HIS 104	SECTION 004	HIS EUR THRU MID-17 CENT
HUMANITIES	HIS 104	SECTION 005	HIS EUR THRU MID-17 CENT
HUMANITIES	HIS 104	SECTION 006	HIS EUR THRU MID-17 CENT
HUMANITIES	HIS 105	SECTION 001	HIS EUR MID 17 CENT-PRES
HUMANITIES	HIS 105	SECTION 002	HIS EUR MID 17 CENT-PRES
HUMANITIES	HIS 105	SECTION 003	HIS EUR MID 17 CENT-PRES
HUMANITIES	HIS 105	SECTION 004	HIS EUR MID 17 CENT-PRES
HUMANITIES	HIS 105	SECTION 005	HIS EUR MID 17 CENT-PRES
HUMANITIES	HIS 105	SECTION 006	HIS EUR MID 17 CENT-PRES
HUMANITIES	HIS 121	SECTION 001	WAR AND SOCIETY, 1914-1945
HUMANITIES	HIS 121	SECTION 002	WAR AND SOCIETY, 1914-1945

HUMANITIES	HIS 121	SECTION 003	WAR AND SOCIETY, 1914-1945
HUMANITIES	HIS 121	SECTION 004	WAR AND SOCIETY, 1914-1945
HUMANITIES	HIS 229	SECTION 001	ANCNT NEAR EAST/GR TO DTH ALEX THE GREAT
HUMANITIES	ID 162	SECTION 001	HIST & THEORY OF INT ENVIRONMENTS II
HUMANITIES	MCL 100	SECTION 001	THE WORLD OF LANGUAGE
HUMANITIES	MUS 100	SECTION 001	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 002	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 003	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 004	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 005	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 006	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 007	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 008	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 009	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 201	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 202	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 203	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 204	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 208	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 209	INTRODUCTION TO MUSIC
HUMANITIES	MUS 100	SECTION 401	INTRODUCTION TO MUSIC
HUMANITIES	PHI 100	SECTION 001	INTRO PHI:KNOWL/REALITY
HUMANITIES	PHI 100	SECTION 002	INTRO PHI:KNOWL/REALITY
HUMANITIES	PHI 100	SECTION 003	INTRO PHI:KNOWL/REALITY
HUMANITIES	PHI 100	SECTION 004	INTRO PHI:KNOWL/REALITY
HUMANITIES	PHI 100	SECTION 005	INTRO PHI:KNOWL/REALITY
HUMANITIES	PHI 100	SECTION 007	INTRO PHI:KNOWL/REALITY
HUMANITIES	PHI 100	SECTION 008	INTRO PHI:KNOWL/REALITY
HUMANITIES	PHI 100	SECTION 009	INTRO PHI:KNOWL/REALITY
HUMANITIES	PHI 100	SECTION 010	INTRO PHI:KNOWL/REALITY
HUMANITIES	RUS 125	SECTION 002	MAPPING RUSSIA: ST PETERSBURG
HUMANITIES	RUS 125	SECTION 003	MAPPING RUSSIA: ST PETERSBURG
HUMANITIES	RUS 125	SECTION 004	MAPPING RUSSIA: ST PETERSBURG
HUMANITIES	SPA 372	SECTION 001	SPANISH CINEMA: INTRO SPA FILM
HUMANITIES	SPA 372	SECTION 002	SPANISH CINEMA:INTRO TO SPA FILM
HUMANITIES	SPA 372	SECTION 003	SPANISH CINEMA:INTRO TO SPA FILM
HUMANITIES	SPA 372	SECTION 004	SPANISH CINEMA:INTRO TO SPA FILM
NATURAL SCIENCES	ANT 230	SECTION 001	INTRO TO PHYSICAL ANT
NATURAL SCIENCES	ANT 230	SECTION 002	INTRO TO PHYSICAL ANT

NATURAL SCIENCES	ANT 230	SECTION 003	INTRO TO PHYSICAL ANT
NATURAL SCIENCES	BIO 102	SECTION 001	HUMAN ECOLOGY
NATURAL SCIENCES	BIO 103	SECTION 001	BASIC IDEAS OF BIOLOGY
NATURAL SCIENCES	CHE 105	SECTION 001	GEN COLLEGE CHEMISTRY I
NATURAL SCIENCES	CHE 105	SECTION 002	GEN COLLEGE CHEMISTRY I
NATURAL SCIENCES	CHE 105	SECTION 003	GEN COLLEGE CHEMISTRY I
NATURAL SCIENCES	CHE 105	SECTION 004	GEN COLLEGE CHEMISTRY I
NATURAL SCIENCES	CHE 105	SECTION 005	GEN COLLEGE CHEMISTRY I
NATURAL SCIENCES	CHE 105	SECTION 006	GEN COLLEGE CHEMISTRY I
NATURAL SCIENCES	CHE 105	SECTION 007	GEN COLLEGE CHEMISTRY I
NATURAL SCIENCES	CHE 105	SECTION 401	GEN COLLEGE CHEMISTRY I
NATURAL SCIENCES	CHE 105	SECTION CE	GEN COLLEGE CHEMISTRY I
NATURAL SCIENCES	CHE 111	SECTION 001	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 002	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 004	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 005	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 007	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 008	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 009	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 010	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 011	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 012	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 013	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 014	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 015	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 016	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 017	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 018	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 019	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 020	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 021	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 022	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 023	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 024	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 025	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 026	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 027	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 028	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION 029	GENERAL CHEMISTRY LAB I

NATURAL SCIENCES	CHE 111	SECTION 030	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	CHE 111	SECTION CE	GENERAL CHEMISTRY LAB I
NATURAL SCIENCES	ENT 110	SECTION 001	INSECT BIOLOGY
NATURAL SCIENCES	GEO 130	SECTION 001	EARTH'S PHYSICAL ENVIRONMENT
NATURAL SCIENCES	GEO 130	SECTION 002	EARTH'S PHYSICAL ENVIRONMENT
NATURAL SCIENCES	GEO 130	SECTION 003	EARTH'S PHYSICAL ENVIRONMENT
NATURAL SCIENCES	GEO 135	SECTION 001	GLOBAL CLIMATE CHANGE
NATURAL SCIENCES	GEO 135	SECTION 002	GLOBAL CLIMATE CHANGE
NATURAL SCIENCES	GEO 135	SECTION 003	GLOBAL CLIMATE CHANGE
NATURAL SCIENCES	GEO 135	SECTION 004	GLOBAL CLIMATE CHANGE
NATURAL SCIENCES	GEO 135	SECTION 005	GLOBAL CLIMATE CHANGE
NATURAL SCIENCES	GEO 135	SECTION 006	GLOBAL CLIMATE CHANGE
NATURAL SCIENCES	GLY 110	SECTION 001	ENDANGERED PLANET INTR TO ENVRNMNTL GEOL
NATURAL SCIENCES	GLY 110	SECTION 002	ENDANGERED PLANET INTR TO ENVRNMNTL GEOL
NATURAL SCIENCES	GLY 110	SECTION 003	ENDANGERED PLANET INTR TO ENVRNMNTL GEOL
NATURAL SCIENCES	GLY 120	SECTION 001	SUSTAINABLE PLANET GLY OF NAT RESOURCES
NATURAL SCIENCES	GLY 120	SECTION 002	SUSTAINABLE PLANET GLY OF NAT RESOURCES
NATURAL SCIENCES	GLY 120	SECTION 003	SUSTAINABLE PLANET GLY OF NAT RESOURCES
NATURAL SCIENCES	GLY 120	SECTION 004	SUSTAINABLE PLANET GLY OF NAT RESOURCES
NATURAL SCIENCES	GLY 120	SECTION 401	SUSTAINABLE PLANET GLY OF NAT RESOURCES
NATURAL SCIENCES	PLS 104	SECTION 001	PLANTS,SOILS&PEOPLE A GLOBAL PERSPECTIVE
NATURAL SCIENCES	PLS 104	SECTION 002	PLANTS,SOILS&PEOPLE A GLOBAL PERSPECTIVE
SOCIAL SCIENCES	ANT 101	SECTION 001	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 002	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 003	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 004	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 005	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 006	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 007	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 008	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 009	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 010	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 011	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 012	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 013	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 014	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 015	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 016	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 017	INTRO TO ANTHROPOLOGY

SOCIAL SCIENCES	ANT 101	SECTION 018	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ANT 101	SECTION 401	INTRO TO ANTHROPOLOGY
SOCIAL SCIENCES	ECO 101	SECTION 001	CONTEMPORARY ECO ISSUES
SOCIAL SCIENCES	ECO 101	SECTION 002	CONTEMPORARY ECO ISSUES
SOCIAL SCIENCES	GEO 172	SECTION 001	HUMAN GEOGRAPHY
SOCIAL SCIENCES	GEO 172	SECTION 002	HUMAN GEOGRAPHY
SOCIAL SCIENCES	GWS 200	SECTION 001	INTRO GWS SOCIAL SCIENCE
SOCIAL SCIENCES	GWS 200	SECTION 002	INTRO GWS SOCIAL SCIENCE
SOCIAL SCIENCES	PSY 100	SECTION 001	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 002	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 003	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 004	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 005	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 006	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 007	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 008	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 009	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 010	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 011	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 012	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 013	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 014	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 015	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 016	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 017	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 018	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 019	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 020	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 021	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 022	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 023	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 024	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 025	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 026	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 027	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 028	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 029	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 030	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 031	INTRO TO PSYCHOLOGY

SOCIAL SCIENCES	PSY 100	SECTION 032	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 033	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 034	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 035	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 036	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 037	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 038	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 039	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 040	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 041	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 042	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 043	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 044	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 045	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 046	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 047	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 048	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 049	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	PSY 100	SECTION 050	INTRO TO PSYCHOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 001	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 002	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 003	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 004	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 005	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 007	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 008	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 009	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 010	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 011	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 012	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 013	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 015	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 016	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 017	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 018	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 019	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 020	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 021	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 023	INTRO TO SOCIOLOGY

SOCIAL SCIENCES	SOC 101	SECTION 024	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 025	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 026	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 027	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 029	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 030	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 031	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 032	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 401	INTRO TO SOCIOLOGY
SOCIAL SCIENCES	SOC 101	SECTION 402	INTRO TO SOCIOLOGY

APPENDIX B

UK Core Intellectual Inquiry in the Arts and Creativity Rubric

UK Core Learning Outcome 1: *Students will demonstrate an understanding of and ability to employ the processes of intellectual inquiry.*

Outcomes and Assessment Framework: Students will: (A) be able to identify multiple dimensions of a good question; determine when additional information is needed, find credible information efficiently using a variety of reference sources, and judge the quality of information as informed by rigorously developed evidence; (B) explore multiple and complex answers to questions/issues/problems within and across the four broad knowledge areas: arts and creativity, humanities, social and behavioral sciences, and natural/physical/mathematical sciences; (C) evaluate theses and conclusions in light of credible evidence; (E) explore the ethical implications of differing approaches, methodologies or conclusions; (D) and develop potential solutions to problems based on sound evidence and reasoning.

	4	3	2	1	0
Identify multiple dimensions of a good question <i>Define and distinguish approaches to creativity.</i>	Specifically identifies, defines and distinguishes an approach to creativity.	Specifically identifies, defines and distinguishes an approach to creativity in a limited way.	Specifically identifies an approach to creativity but does not define or distinguish it.	Acknowledges but does not specifically identify, define or distinguish an approach to creativity.	Does not acknowledge the concept of creativity.
Theses and conclusions <i>Demonstrates the application of logic, laws, constraints of the area of study and the evaluation and refinement of the results of own creative endeavors</i>	Critically evaluates the issues involved in addressing one's own work or implications of differing approaches; clearly articulates an argument and cites appropriate evidence; identifies the actual or potential impact of different approaches.	Articulates major issues involved in addressing one's own work or implications of differing approaches; constructs an argument and supports assertions with a range of evidence.	Identifies issues involved in addressing one's own work or implications of differing approaches; clearly states a position, and supports assertions with some evidence.	Refers to some reasons why evaluation of one's own work or the implications of differing approaches is important but does not support evaluation with evidence.	Does not recognize major issues involved in the evaluation of one's work or implications of differing approaches.

	4	3	2	1	0
<p>Ethical Implications <i>Explore the ethical implications of differing approaches, methodologies or conclusions.</i></p>	Clearly identifies one or more ethical implications; clearly and fully articulates an argument and cites appropriate evidence.	Clearly identifies ethical implication ethical implications of the creative process or product; constructs an argument and supports assertions with a range of evidence.	Clearly identifies ethical implication involved in the creative process or product and supports assertions with some evidence.	Refers to the existence of ethical implications but does not identify them or support that evaluation with evidence.	Does not recognize major ethical implications of the creative process or product.
<p>Develop potential solutions to problems based on sound evidence and reasoning <i>Engage actively in the creation of an object, installation, presentation, performance in a way that demonstrates an understanding of the creative process</i></p>	Evidence of active engagement in creative process in an approach to solving a problem. The solution incorporates at least two of the following: demonstrates sophisticated skills and competency in a discipline or domain (may include novel materials, breaking established rules of practice, etc); employs ways of thinking that are new to the student; crosses boundaries in that it employs one or more approaches to create an insightful comparison; demonstrates thoughtful evaluation and revision.	Evidence of active engagement in creative process in an approach to solving a problem. The solution incorporates at least two of the following: demonstrates basic competency in a discipline or domain (materials, rules of practice, etc); applies ways of thinking that are new to the student; connects one or more ideas, approaches, or processes to create an insightful comparison.	Evidence of active engagement in creative process in an approach to solving a problem. The solution incorporates at least two of the following: applies basic skills in a discipline or domain (materials, rules of practice, etc); experiments with ways of thinking that are new to the student; acknowledges divergent approaches in a small way.	Evidence of active engagement in creative process in an approach to solving a problem. The solution incorporates at least one of the following: attempts basic skills a in a discipline or domain (materials, rules of practice, etc); expresses an idea, concept, or format; acknowledges contradictions.	No evidence of active engagement in creative process.

UK Core Intellectual Inquiry in the Humanities Rubric

UK Core Learning Outcome 1: *Students will demonstrate an understanding of and ability to employ the processes of intellectual inquiry.*

Outcomes and Assessment Framework: Students will: (A) be able to identify multiple dimensions of a good question; determine when additional information is needed, find credible information efficiently using a variety of reference sources, and judge the quality of information as informed by rigorously developed evidence; (B) explore multiple and complex answers to questions/issues/problems within and across the four broad knowledge areas: arts and creativity, humanities, social and behavioral sciences, and natural/physical/mathematical sciences; (C) evaluate theses and conclusions in light of credible evidence; (D) explore the ethical implications of differing approaches, methodologies or conclusions; and (E) develop potential solutions to problems based on sound evidence and reasoning.

	4	3	2	1	0
Ability to identify multiple dimensions of a good question	Incorporates intellectual inquiry and fine discrimination in analysis or critical evaluation of texts and/or arguments. Where necessary, uses appropriate reference sources and provides supporting evidence convincingly and persuasively.	Incorporates intellectual inquiry and fine discrimination in analysis or critical evaluation of texts and/or arguments. Where necessary, uses some reference sources and provides some supporting evidence.	To a certain extent, incorporates intellectual inquiry in analysis or critical evaluation of texts and/or arguments. Where necessary, uses the bare minimum of reference sources but does not provide convincing supporting evidence.	To a very limited extent, incorporates intellectual inquiry in analysis or critical evaluation of texts and/or arguments. Where necessary, fails to use reference sources and does not provide supporting evidence.	Fails to perform any intellectual inquiry with regard to texts and/or arguments, and fails to use any appropriate reference sources.
Ability to explore multiple and complex answers to questions, issues or problems within the Humanities	Convincingly explores and evaluates the complexity of key questions, responses, and arguments in relation to texts or narratives. Explores different points of view on an argument or question.	Explores and evaluates the complexity of key questions, responses, and arguments in relation to texts or narratives. To some extent, explores arguments from different points of view.	To some extent, explores and evaluates the complexity of key questions, responses, and arguments in relation to texts or narratives. To a very limited extent, explores arguments from different points of view.	To a minimal extent, explores key questions, responses, and arguments in relation to texts or narratives, but does not explore arguments from different points of view.	Fails to explore multiple and complex answers to questions, issues or problems.

	4	3	2	1	0
Ability to evaluate theses and conclusions in light of credible evidence	Using appropriate evidence and appropriate disciplinary literacy, critically evaluates key claims, arguments and conclusions pertaining to the subject, including the primary texts and (where applicable) secondary texts under discussion.	Using a certain amount of evidence and of appropriate disciplinary literacy, critically evaluates some of the claims, arguments and conclusions pertaining to the subject.	Using the minimum amount of evidence and of appropriate disciplinary literacy, attempts to evaluate critically some claims, arguments and conclusions pertaining to the subject.	Using the minimum amount of evidence, attempts to evaluate critically some claims pertaining to the subject, but is not entirely successful. Does not demonstrate adequate disciplinary literacy.	Does not critically evaluate any key claims, arguments or conclusions pertaining to the subject; uses no evidence. Fails to demonstrate any disciplinary literacy.
Ability to explore the ethical implications of differing approaches, methodologies or conclusions	Critically evaluates at least one approach, methodology, or interpretive model, showing some awareness of other competing interpretations and of the possible implications of these.	Critically evaluates at least one approach, methodology, or interpretive model, showing some awareness of other competing interpretations and their possible implications.	To a certain extent, evaluates at least one approach, methodology, or interpretive model, but shows minimum awareness of other interpretations and their implications.	To a minimum extent evaluates at least one approach, methodology, or interpretive model, but shows no awareness of other interpretations.	Fails to evaluate at least one approach, methodology, or interpretive model; no awareness of other interpretations.
Develop potential solutions to problems based on sound evidence and reasoning	In the course of written analysis of a text or texts, proposes solutions or answers to intellectual problems or questions, using clear, logical argumentation supported by solid evidence, such as illustrations, examples and/or quotations	In the course of written analysis of a text or texts, proposes solutions or answers to intellectual problems or questions, using clear, logical argumentation supported by some evidence, such as illustrations, examples and/or quotations.	In the course of written analysis of a text or texts, proposes (to a certain extent only) solutions or answers to problems or questions, but there are flaws in the argumentation, and gaps in the evidence.	Makes an attempt at a written analysis of a text or texts, and proposes (to a minimal extent only), solutions or answers to problems or questions, but argumentation is deeply flawed and there is little evidence.	Fails to offer a written analysis of a text or texts, and fails to offer solutions or answers to problems or questions; argumentation is deeply flawed and there is no evidence.

UK Core Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences

UK Core Learning Outcome 1: *Students will demonstrate an understanding of and ability to employ the processes of intellectual inquiry.*

Outcomes and Assessment Framework: Students will: (A) be able to identify multiple dimensions of a good question; determine when additional information is needed, find credible information efficiently using a variety of reference sources, and judge the quality of information as informed by rigorously developed evidence; (B) explore multiple and complex answers to questions/issues problems within and across the four broad knowledge areas: arts and creativity, humanities, social and behavioral sciences, and natural/ physical/mathematical sciences; (C) evaluate theses and conclusions in light of credible evidence; (E) explore the ethical implications of differing approaches, methodologies or conclusions; (D) and develop potential solutions to problems based on sound evidence and reasoning.

Specific Learning Outcomes for Inquiry in the Natural, Physical, and Mathematical Sciences

By the end of the course, students should be able to:

1. Describe methods of inquiry that lead to scientific knowledge and distinguish scientific fact from pseudoscience.
2. Explain fundamental principles in a branch of science.
3. Apply fundamental principles to interpret and make predictions in a branch of science.
4. Demonstrate an understanding of at least one scientific discovery that changed the way scientists understand the world.
5. Give examples of how science interacts with society.
6. Conduct a hands-on project using scientific methods to include design, data collection, analysis, summary of the results, conclusions, alternative approaches, and future studies.
7. Recognize when information is needed and demonstrate the ability to find, evaluate and use effectively sources of scientific information.

* A required student product (paper, laboratory report, presentation, etc.) based on the hands-on project. This requirement is the curriculum-embedded performance based assessable product.

	4	3	2	1	0
Explore multiple and complex answers to questions/issues within the natural, physical and/or mathematical sciences by identifying the dimensions of a good question	<p>The research question is described clearly, completely, fully and in great detail.</p> <p>The research question is answerable by experiment.</p> <p>The hypothesis is based on assumptions with conditions.</p>	<p>The research question is described but some detail is missing.</p> <p>The research question is answerable by experiment but lacks clarity.</p> <p>The hypothesis lacks some assumptions or conditions.</p>	<p>The research question is inadequate or incompletely described.</p> <p>The research question is not answerable by experiment.</p> <p>The hypothesis is not based on assumptions.</p>	<p>The research question is inadequate or incompletely described.</p> <p>The research question is not answerable by experiment.</p> <p>The hypothesis is absent.</p>	<p>The research question is absent.</p> <p>The hypothesis is absent.</p>

	4	3	2	1	0
Explore multiple and complex answers to questions/issues within the natural, physical and/or mathematical sciences by evaluating theses and conclusions in light of credible evidence; and judging the quality of information as informed by rigorously developed evidence	<p>Provides a well-developed evaluation and analysis of the data and questions its accuracy, relevance, and completeness.</p> <p>Justifies key results and procedures, explains assumptions and reasons.</p>	<p>Evaluation and analysis of data contains minor errors/omissions.</p> <p>Justifies some results or procedures, explains reasons.</p>	<p>Evaluation and analysis of data contains major errors/omissions.</p> <p>Justification of results contains significant flaws.</p>	<p>Evaluation and analysis of data contains major errors/omissions.</p> <p>No justification of results.</p>	<p>Evaluation and analysis of data is missing.</p> <p>No justification of results.</p>
Explore multiple and complex answers to questions/issues within the natural, physical and/or mathematical sciences by exploring alternative approaches and/or future study of the research question	<p>Critically evaluates major alternative points of view/ approaches.</p> <p>Provides a detailed description of future research studies.</p> <p>Makes suggestions related to the improvement of the existing experimental design.</p>	<p>Offers evaluations of obvious alternative points of view/approaches.</p> <p>Makes suggestions for future research studies, which have minor flaws.</p> <p>Makes some suggestions for improvement of the existing experimental design, which are incomplete or have minor flaws.</p>	<p>Superficially evaluates obvious alternative points of view/ approaches.</p> <p>Makes suggestions for future research studies, which have significant flaws.</p> <p>Makes some suggestions for improvement of the existing experimental design, which have significant flaws.</p>	<p>Superficially evaluates obvious alternative points of view/ approaches.</p> <p>Does not make suggestions for future research studies, or for the redesigning of the existing procedure.</p>	<p>Fails to evaluate obvious alternative points of view/ approaches.</p> <p>Does not make suggestions for future research studies, or for the redesigning the existing procedure.</p>

UK Core Intellectual Inquiry in the Social Science Rubric

UK Core Learning Outcome 1: *Students will demonstrate an understanding of and ability to employ the processes of intellectual inquiry.*

Outcomes and Assessment Framework: Students will: (A) be able to identify multiple dimensions of a good question; determine when additional information is needed, find credible information efficiently using a variety of reference sources, and judge the quality of information as informed by rigorously developed evidence; (B) explore multiple and complex answers to questions/issues/problems within and across the four broad knowledge areas: arts and creativity, humanities, social and behavioral sciences, and natural/ physical/mathematical sciences; (C) evaluate theses and conclusions in light of credible evidence; (E) explore the ethical implications of differing approaches, methodologies or conclusions; (D) and develop potential solutions to problems based on sound evidence and reasoning.

	4	3	2	1	0
Identify multiple dimensions of a good question <i>Define and distinguish approaches investigating social questions/issues/problems</i>	Incorporates an understanding of conceptual approaches to investigating social questions/ issues/problems in an evaluation or critical analysis	Defines and distinguishes conceptual approaches to investigating social questions/ issues/problems, but does not fully distinguish these differences into an evaluation or critical analysis	Identifies conceptual approaches to investigating social questions/ issues/problems, but does not evaluate or critically analyze them	Acknowledges conceptual approaches to investigating social questions/issues/problems exist but does not identify, critically analyze or evaluate them	Does not acknowledge conceptual approaches to investigating social questions/ issues/problems
Multiple and complex answers to questions/ issues/ problems	Applies an understanding of multiple and complex answers to <i>social questions/ issues/problems</i> ; demonstrates how conceptions of the issue under discussion which are constructed from multiple perspectives	Describes multiple and complex answers to <i>social questions/ issues/problems</i> ; provides historical and cultural background to the issue under discussion	Identifies multiple and complex answers to <i>social questions/ issues/problems</i> ; exhibits a basic understanding of the issue under discussion	Does not correctly identify multiple and complex answers to <i>social questions/ issues/problems</i> ; exhibits a shallow or flawed understanding of the issue under discussion	Does not identify multiple and complex answers to <i>social questions/ issues/problems</i>

	4	3	2	1	0
Theses and conclusions <i>Explore empirical evidence or conclusions drawn from empirical evidence</i>	Critically evaluates the methodological issues involved in generating data and coming to conclusions about <i>social questions/ issues/ problems</i> ; clearly articulates an argument and cites appropriate evidence; identifies the actual or potential impact of different approaches	Articulates major methodological issues involved in generating data and coming to conclusions about <i>social questions/ issues/ problems</i> ; constructs an argument and supports assertions with a range of evidence	Identifies methodological issues involved in generating data and coming to conclusions about <i>social questions/ issues/ problems</i> ; clearly states a position, and supports assertions with some evidence	Refers to some methodological issues involved in generating data and coming to conclusions about the <i>social questions/ issues/ problems</i> ; states a position is important but does not support evaluation with evidence	Does not recognize methodological issues involved in generating data and coming to conclusions about <i>social questions/ issues/ problems</i>
Ability to explore the ethical implications of differing approaches, methodologies or conclusions	Critically evaluates different approaches, methodologies, or interpretive models, fully demonstrating awareness of their ethical implications on <i>social questions/ issues/ problems</i>	Critically evaluates different approaches, methodologies, or interpretive models, showing some awareness of their ethical implications on <i>social questions/ issues/ problems</i>	To some extent, evaluates different approaches, methodologies, or interpretive models, acknowledging awareness of their ethical implications on <i>social questions/ issues/ problems</i>	Identifies different approaches, methodologies, or interpretive models, but shows no awareness of the ethical implications of these on <i>social questions/ issues/ problems</i>	Fails to identify or evaluate approaches, methodologies, or interpretive models; shows no awareness of their ethical implications on <i>social questions/ issues/ problems</i>
Develop potential solutions to problems based on sound evidence and reasoning <i>Engage actively in the examination of a social questions/ issues/ problem in a way that demonstrates an understanding of the inquiry process</i>	Proposes solutions to <i>social questions/ issues/ problems</i> that demonstrates understanding of the generation/analysis of data and applies findings to potential solutions	Proposes solutions to <i>social questions/ issues/ problems</i> that demonstrates some understanding of the generation/analysis of data and how findings might be applied to potential solutions	Proposes solutions to <i>social questions/ issues/ problems</i> that demonstrates minimum understanding of the generation/analysis of data and how findings might be applied to potential solutions	Proposes solutions to <i>social questions/ issues/ problems</i> but demonstrates no understanding of the generation/analysis of data and how findings might be applied to potential solutions	No evidence of identifying solutions to <i>social questions/ issues/ problems</i>

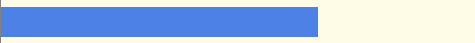

Appendix C – Evaluator Survey Results

Arts & Creativity

Initial Report

Last Modified: 05/11/2012

1. Q1. On a scale of 1-5, with 1 being very difficult and 5 being very easy, how would you describe the evaluation process using Bb Outcomes?

#	Answer		Response	%
1	1		0	0%
2	2		0	0%
3	3		2	67%
4	4		1	33%
5	5		0	0%
	Total		3	100%

Statistic	Value
Min Value	3
Max Value	4
Mean	3.33
Variance	0.33
Standard Deviation	0.58
Total Responses	3

2. Q2. What one change would you recommend to the Bb Outcomes system?

#	Answer	Response	%
1	Go directly to the evaluation space without having to search through 'My Places.'	1	33%
2	Only see the evaluations (i.e. the Analyze tab) and not all of the information in the packet (i.e. Collected Evidence).	0	0%
3	View the student work and rubric on the same screen.	2	67%
4	Provide an evaluator report of the scores that I submitted.	0	0%
5	Other: Please explain	0	0%
	Total	3	100%

Other: Please explain

Statistic	Value
Min Value	1
Max Value	3
Mean	2.33
Variance	1.33
Standard Deviation	1.15
Total Responses	3

3. Q3. Did you experience any errors in the Bb system during your evaluation time?

#	Answer	Response	%
1	Yes - go to Q4	0	0%
2	No - go to Q5	3	100%
	Total	3	100%

Statistic	Value
Min Value	2
Max Value	2
Mean	2.00
Variance	0.00
Standard Deviation	0.00
Total Responses	3

4. Q4. How much extra time do you estimate you spent in the system due to errors?

#	Answer	Response	%
1	0-1 hour	0	0%
2	1-2 hours	0	0%
3	More than 2 hours	0	0%
	Total	0	0%

Statistic	Value
Min Value	-
Max Value	-
Mean	0.00
Variance	0.00
Standard Deviation	0.00
Total Responses	0

5. Q5. On a scale of 1 – 5, with 1 being least effective and 5 being most effective, how would you rate the Creativity Inquiry outcome's rubric?

#	Answer	Response	%
1	1	0	0%
2	2	1	33%
3	3	1	33%
4	4	1	33%
5	5	0	0%
	Total	3	100%

Statistic	Value
Min Value	2
Max Value	4
Mean	3.00
Variance	1.00
Standard Deviation	1.00
Total Responses	3

6. Q6. How might the rubric be improved? (limited to 1,000 characters)

Text Response

The rubric would benefit from being written in a language that relates more specifically to the areas it is evaluating. The ethical implications section is not clearly defined and does not seem to relate to the assignments being evaluated. For example, what might work here is how the student placed their work in context (historical/contemporary) and referenced other artists, musicians, movements, etc. Generally speaking, the rubric created and the assignments given do not seem to match up very well. It would be very helpful for faculty giving the assignments to have a hand in creating the rubrics.

Use of nomenclature that is relevant to typical pedagogy in creativity. The use of the word ethical is not relevant and needs to be changed in the learning outcome itself as well as in the sub-heading on the rubric.

Use different terminology in the descriptions than those used in the objectives. Further explain the objectives in different terms.

Statistic	Value
Total Responses	3

7. Q8. Based on the total of the assignments that you evaluated, what would you say is the one thing that students did well? (limited to 1,000 characters)

Text Response

Many did well in defining and distinguishing approaches to creativity. I could clearly see in all of the projects I evaluated that students did in fact learn to think creatively.

I believe this question is faulty in itself, as we were asked to assess the projects through the student outcomes and not the student's ability to accomplish their work.

Students seem to be doing a good job at creative problem solving. They are applying interesting solutions to the problems presented.

Statistic	Value
Total Responses	3

8. Q9. Based on the total of the assignments that you evaluated, what would you say is the one thing that students need to improve? (limited to 1,000 characters)

Text Response

Explaining why they chose to represent the idea/story/theme/etc with the specific technique/process they used. Understanding the context of their work, which could be a cultural, historical or artistic context for the work (i.e. a specific film, photographer, artistic movement, social issue, etc.).

I believe this question is faulty in itself, as we were asked to assess the projects through the student outcomes and not the student's ability to accomplish their work.

The need improvement on critical analyzing the projects they create. They are actually doing more than they can articulate.

Statistic	Value
Total Responses	3

9. On a scale of 1 - 5, with 1 being no match at all and 5 being very well matched, how well would you say that the assignments matched the rubric?

#	Answer	Response	%
1	1	0	0%
2	2	2	67%
3	3	1	33%
4	4	0	0%
5	5	0	0%
	Total	3	100%

Statistic	Value
Min Value	2
Max Value	3
Mean	2.33
Variance	0.33
Standard Deviation	0.58
Total Responses	3

10. What suggestions would you make for the overall UK Core assessment process? Feel free to comment about communication with faculty, the gathering of student work, and the evaluation process.

Text Response

Request projects that are not just technical, but have a conceptual aspect as well. Request that only one project is uploaded and that formats are consistent. Beyond writing, we need to see examples of the work (which could be a short video, photograph, audio, etc). Projects evaluated should be completed by an individual and not evaluated as a group project. Guideline should be sent to faculty, along with an updated rubric. Projects that only have a photo or only have text (esp. in the fine art context) should not be evaluated.

We need to work more diligently to get students to follow direction on the process. Many of the packets were incomplete, having an image and no description or vice versa. This needs more emphasis in the classes generating these products.

Statistic	Value
Total Responses	2

Humanities

Initial Report

Last Modified: 05/10/2012

1. Q1. On a scale of 1-5, with 1 being very difficult and 5 being very easy, how would you describe the evaluation process using Bb Outcomes?

#	Answer	Response	%
1	1	2	22%
2	2	0	0%
3	3	3	33%
4	4	4	44%
5	5	0	0%
	Total	9	100%

Statistic	Value
Min Value	1
Max Value	4
Mean	3.00
Variance	1.50
Standard Deviation	1.22
Total Responses	9

2. Q2. What one change would you recommend to the Bb Outcomes system?

#	Answer	Response	%
1	Go directly to the evaluation space without having to search through 'My Places.'	1	13%
2	Only see the evaluations (i.e. the Analyze tab) and not all of the information in the packet (i.e. Collected Evidence).	1	13%
3	View the student work and rubric on the same screen.	4	50%
4	Provide an evaluator report of the scores that I submitted.	2	25%
5	Other: Please explain	0	0%
	Total	8	100%

Other: Please explain

Statistic	Value
Min Value	1
Max Value	4
Mean	2.88
Variance	0.98
Standard Deviation	0.99
Total Responses	8

3. Q3. Did you experience any errors in the Bb system during your evaluation time?

#	Answer	Response	%
1	Yes - go to Q4	5	56%
2	No - go to Q5	4	44%
	Total	9	100%



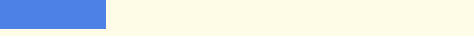
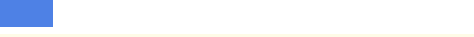

Statistic	Value
Min Value	1
Max Value	2
Mean	1.44
Variance	0.28
Standard Deviation	0.53
Total Responses	9

4. Q4. How much extra time do you estimate you spent in the system due to errors?

#	Answer	Response	%
1	0-1 hour	5	100%
2	1-2 hours	0	0%
3	More than 2 hours	0	0%
	Total	5	100%

Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	5

5. Q5. On a scale of 1 – 5, with 1 being least effective and 5 being most effective, how would you rate the Humanities Inquiry outcome’s rubric?

#	Answer		Response	%
1	1		1	11%
2	2		5	56%
3	3		2	22%
4	4		1	11%
5	5		0	0%
	Total		9	100%

Statistic	Value
Min Value	1
Max Value	4
Mean	2.33
Variance	0.75
Standard Deviation	0.87
Total Responses	9

6. Q6. How might the rubric be improved? (limited to 1,000 characters)

Text Response

items need to take into account diversity of assignments submitted, be more precisely formulated, less repetitive, more distinct from each other

Rubric categories should be mutually exclusive and more generically applicable to a university level research or argument paper. The theory of composition should be clear to scorers. For example: 1) A thesis category; 2) A topic sentence category; 3) An evidence category; 4) An Analysis/Reason Category; 5) An Acknowledgment of other points of view and response category.

I think the language regarding the development of the argument needs to be improved, so that it is clearly defined and separate. I also would like to see some language regarding the WAY the student uses the resources, ie does the student use secondary resources in an appropriate and effective manner.

make it a concise three-choice rubric. clarify what the criterion for each objective is and what falls below and exceeds it.

Some of the wording needs to be changed as we discussed. Headings need to be established in place of numbers to give reviewers a global understanding of what a 4 means, etc. Under the criterion, a list of possible key words could be used to help categorize the criteria: thesis, ideas, argument, evidence, logic, etc. These words can help the evaluator, the professor and the student understand what kinds of things help meet the criteria, then look to the rubric to see how to perform with those concepts. Remove the word "fail", even if people say they do not have a problem "failing" someone or something, they do psychologically- not to mention, that terminology can be used against UK while collecting data.

Some of the criteria involved assessing more than one skill. For example: "Ability to identify multiple dimensions of a good question" appropriately asked about intellectual inquiry, but also threw in use of sources, which fit better with some of the other criteria. I think the categories could be streamlined considerably. As we noted, having a description of the level of competency ("Just meets college-level expectations") listed at the top would be helpful.

more specific differences between 3 & 4, multiple items separated, accounting for style and structure

The problem was not the rubric so much as some of these early assignments not conforming to the post-created rubric

Statistic	Value
Total Responses	8

7. Q8. Based on the total of the assignments that you evaluated, what would you say is the one thing that students did well? (limited to 1,000 characters)

Text Response
summarize info, describe texts/images
Students summarized what they read well. This ability to summarize what was read is not a college-level skill and thus was difficult to grade on this rubric.
Most students did a fairly good job of defining their thesis statement at the start of the essays.
Student writing was, for the most part, clear and coherent.
Students followed directions well; responses were formulaic answers to direct questions even when they weren't accurate or insightful.
I do think that the students are putting forth an effort and trying to produce something educated. I feel that they express themselves, they take an interest in their courses and they do learn.
Students understood the importance of thesis statements. They didn't always successfully write one that was clear, but they appeared to know what a thesis statement is and to highlight it in their introductions.
very difficult to say. a large portion of the assignments were not relevant to the rubric. mostly descriptive exercises with little critical analysis
The arguments were often creative and unique


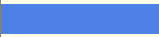

Statistic	Value
Total Responses	9

8. Q9. Based on the total of the assignments that you evaluated, what would you say is the one thing that students need to improve? (limited to 1,000 characters)

Text Response
argument: form thesis statement, draw distinctions, identify and assess multiple positions
Students need to improve their ability to react to other points of view, respond to them with evidence, and construct their OWN arguments about a subject of inquiry. Papers overly dependent upon research or reading of outside sources that are not primary artifacts of analysis are not appropriate at this level.
Coherent consistent development of their arguments throughout the paper
Students need to work on critical thinking, particularly as it pertains to constructing critical, contestable thesis statements.
Students need to be read closely and with purpose; they need to be inspired to pose critical questions, not just spit out answers that suffice.
Structuring their argument. But this takes time and lots of practice.
Organization. A simple understanding of how to build an argument around paragraphs and topic sentences could improve their papers considerably.
original thought, structuring an argument, learning to write less like wikipedia articles
proofreading

Statistic	Value
Total Responses	9

9. On a scale of 1 - 5, with 1 being no match at all and 5 being very well matched, how well would you say that the assignments matched the rubric?

#	Answer		Response	%
1	1		0	0%
2	2		5	56%
3	3		3	33%
4	4		1	11%
5	5		0	0%
	Total		9	100%

Statistic	Value
Min Value	2
Max Value	4
Mean	2.56
Variance	0.53
Standard Deviation	0.73
Total Responses	9

10. What suggestions would you make for the overall UK Core assessment process? Feel free to comment about communication with faculty, the gathering of student work, and the evaluation process.

Text Response

assignments submitted need to fit rubric (I had one Q&A assignment); rubric needs to take into account that not all artefacts are original pieces of argumentation or research; the rubric demands a very comprehensive sort of assignment

It is unclear what the goals of the assessment are or what the data will be used for. The rubric is so general and the classes so disparate it seems impossible to construct Core goals from whatever data are being collected. Unfortunately it seems like far too many courses have been assigned "Core" without any real "Coreness" being incorporated into their structure.

It would be nice to have a more varied sample of work from different classes. Reading the same essays over and over again, especially when they are not in your field and are vague, is very difficult. More variety would make for a better and more accurate evaluation process and a more equitable distribution of the workload among the assessors.

The environment in which we were asked to do assessment work was not conducive to thoughtful evaluation.

The faculty and the students HAVE to have the rubric. It really is not fair to assess anyone without understanding how they are being assessed. Faculty need to know which of their assignments best fit the assessment, and potentially need to write a justification (150) words as to how they see the assignment meeting the goals of the rubric. It needs to be put on the syllabus of UK Core courses, with a link to the rubric for students to see. And faculty need to be trained about how the rubric is going to be interpreted and used so they can communicate this with students. And you need to brace yourself for backlash. :)




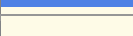
This process will feel more useful, I suspect, in the future after faculty have been made aware of the rubrics and had a better chance to match assignments to the expected outcomes. At this point it felt like a hollow effort. The rubric needs to be tweaked. I struggled to discern the criteria in light of a range of very diverse assignments. Coffee would be nice too!

More communication with the faculty teaching the courses as to what should be assigned and evaluated

Fairly smooth process. Would suggest access to coffee all day :) and a greater emphasis on matching at least ONE course assignment to the actual rubric.


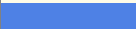


Statistic	Value
Total Responses	8

1. Q1. On a scale of 1-5, with 1 being very difficult and 5 being very easy, how would you describe the evaluation process using Bb Outcomes?

#	Answer		Response	%
1	1		1	14%
2	2		0	0%
3	3		1	14%
4	4		3	43%
5	5		2	29%
	Total		7	100%

Statistic	Value
Min Value	1
Max Value	5
Mean	3.71
Variance	1.90
Standard Deviation	1.38
Total Responses	7

2. Q2. What one change would you recommend to the Bb Outcomes system?

#	Answer		Response	%
1	Go directly to the evaluation space without having to search through 'My Places.'		0	0%
2	Only see the evaluations (i.e. the Analyze tab) and not all of the information in the packet (i.e. Collected Evidence).		1	14%
3	View the student work and rubric on the same screen.		2	29%
4	Provide an evaluator report of the scores that I submitted.		1	14%
5	Other: Please explain		3	43%
	Total		7	100%

Other: Please explain

Make the rubric fully show up . Had to stroll the Bb window AND the rubric window to access the buttons. A lot of scrolling to click 4 simple buttons.

I thought it was fine the way it was.

no recommendations

Statistic	Value
Min Value	2
Max Value	5
Mean	3.86
Variance	1.48
Standard Deviation	1.21
Total Responses	7

3. Q3. Did you experience any errors in the Bb system during your evaluation time?

#	Answer		Response	%
1	Yes - go to Q4		3	43%
2	No - go to Q5		4	57%
	Total		7	100%



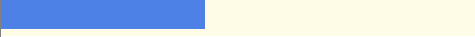
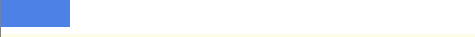

Statistic	Value
Min Value	1
Max Value	2
Mean	1.57
Variance	0.29
Standard Deviation	0.53
Total Responses	7

4. Q4. How much extra time do you estimate you spent in the system due to errors?

#	Answer		Response	%
1	0-1 hour		4	100%
2	1-2 hours		0	0%
3	More than 2 hours		0	0%
	Total		4	100%

Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	4

5. Q5. On a scale of 1 – 5, with 1 being least effective and 5 being most effective, how would you rate the Science Inquiry outcome’s rubric?

#	Answer		Response	%
1	1		1	14%
2	2		2	29%
3	3		3	43%
4	4		1	14%
5	5		0	0%
	Total		7	100%

Statistic	Value
Min Value	1
Max Value	4
Mean	2.57
Variance	0.95
Standard Deviation	0.98
Total Responses	7

6. Q6. How might the rubric be improved? (limited to 1,000 characters)

Text Response

The rubric only allows for hands on experiences that involve hypothesis testing. There are many valid experiments that meet the criteria of the hands on project learning outcome that don't involve hypothesis testing. For example, analyzing an unknown to identify it or determine the amount is valid and would include all the features listed but is not hypothesis testing.

I think there should be one other question concerning methodology for the projects. Currently there is the introduction, data results and analysis, and the conclusion. But there isn't any topic that refers to how they obtained data, how they made measurements, or a scheme for how to answer their hypothesis. This is a very key aspect of a research project. It is even true if the research doesn't involve quantitative measurements. If a student is looking qualitatively at an image, or comparing two features qualitatively, they should still express the criteria that they are going to use to decide what something is, or how two things are different. This criteria is essential for people reading the report to be able to assess the outcomes.

Make it more general. It is currently for hypothesis-driven research only, not for other types of ones (e.g., observational studies) at all.

The rubric is somewhat limited to a traditional experiment and doesn't allow for observational types of inquiry.

could be more specific - have more detailed descriptions of what the numbers are based on

The current rubric is designed to assess research projects although other assignments could be and were submitted (see comments in the suggestion section of the survey). If that focus were retained, I would offer the following suggestions. Section on identifying a good question– Change the second criterion to, "The research question is answerable by experiment or observation" given that not all scientific research needs to be experimental. For the third criterion, the statement might be clearer if changed to, "The hypothesis is based on a reasonable rationale" versus "assumptions with conditions." Given the restrictions on length of response, my feedback for this question is continued in the overall suggestion box.

Include a section that evaluates whether the methods actually test the hypothesis. Of course, any methods that the student applies will be constrained by ability and resources, but the methods should at least test the hypothesis.

Statistic	Value
Total Responses	7

7. Q8. Based on the total of the assignments that you evaluated, what would you say is the one thing that students did well? (limited to 1,000 characters)

Text Response

I had one set of assignments that did good data collection and evaluation of the data to demonstrate understanding of weather patterns. I believe the assignment met the criteria of "data collection, analysis, summary of results, conclusions" but had to be rated a zero according to the rubric.

They did well researching the background concerning their topics. But the majority of the assignments I evaluated did not follow the rubric for a research project what-so-ever

Performing experimental research, and good interpretations of results

Based on the rubric, nothing as the assignment did not fit the rubric at all.

Imbedding graphics - graphs, tables, photos, charts

Most were able to follow the very specific directions of the assignments they were given.

Statistic	Value
Total Responses	6

8. Q9. Based on the total of the assignments that you evaluated, what would you say is the one thing that students need to improve? (limited to 1,000 characters)

Text Response

I don't believe it was a student issue but an instructor issue if not designing an assignment to match what would be evaluated.

I am not sure what the students need to improve on. The instructors for the courses must begin do real research projects and not simply book reports on other peoples research. What I saw were not a research projects. But I don't think this was the students' fault. It was the instructor who didn't realize what a student project actually is.

Drawing implications

improve their explanations beyond the superficiala information they get from resources (i.e. not use a collection of quotes, but have their own original ideas)

Their writing skills are very poor. There is little evidence of some students proofreading their paper or even using a spelling/grammar checker. A paper we all reviewed for the "norming" procedure was supposed to be on a simulation of species and the student wrote a "stimulation of spices." Of course, a spell checker wouldn't catch that. At least we all got a good laugh.

They showed an inability to consider deeper reasons for their results beyond the surface answer.

Statistic	Value
Total Responses	6

9. On a scale of 1 - 5, with 1 being no match at all and 5 being very well matched, how well would you say that the assignments matched the rubric?

#	Answer	Response	%
1	1	4	57%
2	2	3	43%
3	3	0	0%
4	4	0	0%
5	5	0	0%
	Total	7	100%

Statistic	Value
Min Value	1
Max Value	2
Mean	1.43
Variance	0.29
Standard Deviation	0.53
Total Responses	7

10. What suggestions would you make for the overall UK Core assessment process? Feel free to comment about communication with faculty, the gathering of student work, and the evaluation process.

Text Response

The rubric needs to be revisited. Once obtained it must be communicated with all UK core faculty teaching the course.

The faculty need to be made aware of the rubric that we use to assess the projects. I am sure that for the courses I evaluated, the faculty was not aware of what a student research project actually involves. One way they could learn is to require all GenEd faculty to spend about an hour or two going through the normalization exercise that the evaluators did before begin our evaluations. Then they would see first hand that writing a report from references found on the web is not compliant with the GenEd rubric. The root of the problem is that most faculty do not understand what project enhanced instruction is. They seem to think that simply modifying a lab or asking students to read an article is student research. It is not. So this problem must be corrected before the GenEd student research projects can be advanced to a higher level.

The current rubric is very seriously flawed. I strongly believe that there MUST be different versions of rubric, in order to accommodate different types of assignments and research. I often encounter people who consider hypothesis-driven research to be the only scientific one. I think the rubric has been developed based on that belief, which is totally flawed.

I think the actual process worked well and was well organized. What frustrated me was that some of the evaluators seemed to want to have a philosophical discussion on the merits of this type of assessment..



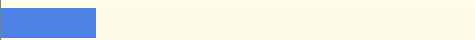
better communication as to what the assessment is looking for so that the assignment given matches what the assessment is based on - having the rubric BEFORE having to make the assignment

Response to Question 6 continued – Section on exploring alternative approaches – The category is "... exploring alternative approaches and/or future study of the research question" and yet the rubric lists them as separate criteria to be satisfied. Shouldn't there be an "and/or" in each of the boxes? Between the question section and the analysis/evaluation section – How about a Methods section? "Explore multiple and complex answers ... by designing scientifically sound methods for testing a hypothesis." Criteria could be: 1. Description of methods is clear. 2. If an experiment, dependent and independent variables are clearly identified. 3. The proposed method tests the hypothesis. Overall Suggestions - The rubric needs to align with the assignments. The rubric is currently written to assess learning outcome #6 in the natural science template, but assignments varied. While some were indeed research-based, others were papers that reviewed a publication or video while others were posters displaying information gathered, most probably, from the Internet (for example, on climate change). There needs to be clear communication with natural science faculty as to what student products are acceptable for UK Core assessment purposes. There are 7 learning outcomes in the natural science UK Core template. I think faculty were lead to believe that they could choose a student product that would satisfy one or more of these learning outcomes. The rubric, however, is written to assess learning outcome #6 only – a hands-on research project. This is, in my opinion, the most appropriate artifact to assess, but I don't think this has been made clear to instructors. Also, the rubric needs to be made available to the faculty who, in turn, can share it with students so all know what is expected.

Make sure the faculty know the rubric beforehand. Faculty teaching should Core courses should be required to evaluate at least some results. The reasons for the assessment and actions taken on the assessments should be more clear..

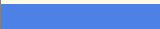

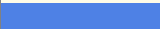
Statistic	Value
Total Responses	7

1. Q1. On a scale of 1-5, with 1 being very difficult and 5 being very easy, how would you describe the evaluation process using Bb Outcomes?

#	Answer		Response	%
1	1		0	0%
2	2		0	0%
3	3		2	40%
4	4		2	40%
5	5		1	20%
	Total		5	100%

Statistic	Value
Min Value	3
Max Value	5
Mean	3.80
Variance	0.70
Standard Deviation	0.84
Total Responses	5


2. Q2. What one change would you recommend to the Bb Outcomes system?

#	Answer		Response	%
1	Go directly to the evaluation space without having to search through 'My Places.'		1	33%
2	Only see the evaluations (i.e. the Analyze tab) and not all of the information in the packet (i.e. Collected Evidence).		1	33%
3	View the student work and rubric on the same screen.		1	33%
4	Provide an evaluator report of the scores that I submitted.		0	0%
5	Other: Please explain		0	0%
	Total		3	100%

Other: Please explain

Statistic	Value
Min Value	1
Max Value	3
Mean	2.00
Variance	1.00
Standard Deviation	1.00
Total Responses	3

3. Q3. Did you experience any errors in the Bb system during your evaluation time?

#	Answer		Response	%
1	Yes - go to Q4		0	0%
2	No - go to Q5		4	100%
	Total		4	100%

Statistic	Value
Min Value	2
Max Value	2
Mean	2.00
Variance	0.00
Standard Deviation	0.00
Total Responses	4

4. Q4. How much extra time do you estimate you spent in the system due to errors?

#	Answer	Response	%
1	0-1 hour	0	0%
2	1-2 hours	0	0%
3	More than 2 hours	0	0%
	Total	0	0%

Statistic	Value
Min Value	-
Max Value	-
Mean	0.00
Variance	0.00
Standard Deviation	0.00
Total Responses	0

5. Q5. On a scale of 1 – 5, with 1 being least effective and 5 being most effective, how would you rate the Social Science Inquiry outcome's rubric?

#	Answer	Response	%
1	1	0	0%
2	2	2	50%
3	3	1	25%
4	4	1	25%
5	5	0	0%
	Total	4	100%

Statistic	Value
Min Value	2
Max Value	4
Mean	2.75
Variance	0.92
Standard Deviation	0.96
Total Responses	4

6. Q6. How might the rubric be improved? (limited to 1,000 characters)

Text Response

1) There needs to be a "not applicable" option. 2) Some of the content is unrealistic (e.g., research ethics in a 100-level course). 3) The overall science of the process is questionable.

It is too much to expect of what are largely freshman in 100-level courses. Methods and theoretical/conceptual knowledge are both covered, yet it is very difficult to do both of these well in one assignment that is appropriate in length and scope for undergraduates. Likewise, most intro social science courses do not cover research ethics, so this was largely N/A.

The rubric did not "fit" many of the writing samples that were evaluated.

Statistic	Value
Total Responses	3

7. Q8. Based on the total of the assignments that you evaluated, what would you say is the one thing that students did well? (limited to 1,000 characters)

Text Response

I evaluated 22 students who did one assignment and 3 students who did another. For the 22 students doing the first assignment, the strength was exploring multiple approaches to a particular question.

None of my assignments demonstrated the rubric items well, which is not surprising given that faculty hadn't seen the rubric before planning their assignments!

Applied social science concepts to novel events or materials (e.g., real world situations, others' published research, etc.)

They gave very insightful answers that drew on their personal experiences.

Statistic	Value
Total Responses	4

8. Q9. Based on the total of the assignments that you evaluated, what would you say is the one thing that students need to improve? (limited to 1,000 characters)

Text Response

Of the 22 students doing the first assignment, there was no consideration of ethics, though this is not the fault of the students...more the fault of the assignment.

Can't say since the assignments were not a good fit for this evaluation

Hard to tell what students don't know versus what was not covered or required in the assignments. Students seemed to have issues with independent and dependent variables and controls (quantitative methods).

Grammar, sentence structure, and organization

Statistic	Value
Total Responses	4

9. On a scale of 1 - 5, with 1 being no match at all and 5 being very well matched, how well would you say that the assignments matched the rubric?

#	Answer	Response	%
1	1	2	50%
2	2	1	25%
3	3	1	25%
4	4	0	0%
5	5	0	0%
	Total	4	100%

Statistic	Value
Min Value	1
Max Value	3
Mean	1.75
Variance	0.92
Standard Deviation	0.96
Total Responses	4

10. What suggestions would you make for the overall UK Core assessment process? Feel free to comment about communication with faculty, the gathering of student work, and the evaluation process.

Text Response

I never did think we got normed. In the discussions between the professors, we should have discussed not the general score each of us gave to an assignment, but each of the five specific scores. That seems to me like the only way to really make sure we are on the same page.

again, the science behind this process needs to be evaluated. Junk in = junk out!

The rubric needs to be simplified and possibly broken into two parts (methods OR concepts/theory). Also, instructors should receive a copy of the rubric before designing their course and assignments to be evaluated.

Seems like the sample of assignments that evaluated represent a very small sample. As much as I hate to say it, I think that we need to evaluate a larger sample of papers to get a good assessment.

Statistic	Value
Total Responses	4