Quasi-Curricular Proposal
Creation of the New Rowan Core
March 11, 2015

I. DETAILS

A. Proposal Title: Creation of the New Rowan Core

B. Sponsor(s): Ad Hoc Committee on the Rowan Core:
Michael Grove, Committee Chair, Biological Sciences
Fred Adelson, Art
Ralph Dusseau, Civil and Environmental Engineering
Andrew Kopp, Writing Arts
Marilyn Manley, Foreign Languages & Literatures
Lourin Plant, Music
Bruce Plourde, English
Joel Rudin, Management and Entrepreneurship
Holly Willett, Language, Literacy and Special Education

C. Changes (in From/To Format):

1. Creation of a Rowan Core Standing Senate Committee (RCSS Committee)
Implementation Date: Fall 2015

2. Establishment of a Rowan Core Director (RC Director)
Implementation Date: Spring 2016

3. Replacing General Education bank requirements with the new Rowan Core:

B.A. programs:

From:	C.Hs	To:	C.Hs
Major Requirements	30-39	Major Requirements	30-39
Specified General Education Banks		Rowan Core	
Communication Bank		Communicative Literacy	
COMP 01.111 College Composition I (or its equivalent)	3	COMP 01.111 College Composition I (or its equivalent)	3
COMP 01.112 College Composition II (or its equivalent)	3	COMP 01.112 College Composition II (or its equivalent)	3
		CMS 04205 Public Speaking (or its equivalent)	3
Science and Mathematics Bank	7	Quantitative Literacy Designated Course	3
Social and Behavioral Sciences Bank	6	Scientific Literacy Designated Course	3
History, Humanities and Languages Bank	6	Humanistic Literacy Designated Course	3
		Artistic Literacy Designated Course	3
		Global Literacy Designated Course	3
Non Program (Gen Ed) Courses	26-35	Non Program (Gen Ed) Courses	27-36

Free electives	21-30	Free electives	21-30
Minimum Semester Hours for Degree	120-122	Minimum Semester Hours for Degree	120-122

B.S. programs:

From:	C.Hs	To:	C.Hs
Major Requirements	60-64	Major Requirements	60-64
Specified General Education Banks		Rowan Core	
Communication Bank COMP 01.111 College Composition I (or its equivalent) COMP 01.112 College Composition II (or its equivalent)	 3 3	Communicative Literacy COMP 01.111 College Composition I (or its equivalent) COMP 01.112 College Composition II (or its equivalent) CMS 04205 Public Speaking (or its equivalent)	 3 3 3
Science and Mathematics Bank Social and Behavioral Sciences Bank	7 6	Quantitative Literacy Designated Course Scientific Literacy Designated Course	3 3
History, Humanities and Languages Bank	6	Humanistic Literacy Designated Course	3
		Artistic Literacy Designated Course	3
		Global Literacy Designated Course	3
Non Program (Gen Ed) Courses	17-29	Non Program (Gen Ed) Courses	18-30
Free electives	6-18	Free electives	6-18
Minimum Semester Hours for Degree	120-122	Minimum Semester Hours for Degree	120-122

Specialized programs:

From:	C.Hs	To:	C.Hs
Major Requirements	60+	Major Requirements	60+
Specified General Education Banks		Rowan Core	
Communication Bank COMP 01.111 College Composition I (or its equivalent) COMP 01.112 College Composition II (or its equivalent)	 3 3	Communicative Literacy COMP 01.111 College Composition I (or its equivalent) COMP 01.112 College Composition II (or its equivalent) CMS 04205 Public Speaking (or its equivalent)	 3 3 3
Science and Mathematics Bank Social and Behavioral Sciences Bank	7 6	Quantitative Literacy Designated Course Scientific Literacy Designated Course	3 3
History, Humanities and Languages Bank	6	Humanistic Literacy Designated Course	3
		Artistic Literacy Designated Course	3

		Global Literacy Designated Course	3
Non Program (Gen Ed) Courses	17	Non Program (Gen Ed) Courses	18
Free electives	0+	Free electives	0+
Minimum Semester Hours for Degree	120+	Minimum Semester Hours for Degree	120+

Implementation Date: The Rowan Core will be required of all incoming freshmen and transfer students in Fall 2017.

4. Implemented Modifications to Specific Rowan Experience Requirements:

From:	To:
Public Speaking (CMS 04205) (or its equivalent)	Public Speaking (CMS 04205) (or its equivalent)
Artistic and Creative Experience (ACE) Designated Course	Replaced by the Artistic Literacy Designated Course requirement within the Rowan Core
Multicultural/Global (M/G) Designated Course	Replaced by the Global Literacy Designated Course requirement within the Rowan Core
In-Class Laboratory (LAB) Designated Course	Optional program-specific requirement outside of the Rowan Core (i.e. in Non-Program Courses)

Implementation Date: These modifications to Rowan Experience will take effect for all incoming freshmen and transfer students in Fall 2017.

5. Recommended Modifications to Specific Rowan Experience Requirements

From:	To:
Rowan Seminar (RS) Designated Course (required for all freshmen and transfers with freshman status, entering with fewer than 24 credits)	Rowan Seminar (RS) Designated Course (required for all freshmen and transfers with freshman status, entering with fewer than 24 credits)
Writing Intensive (WI) Designated Course	Optional program-specific requirement outside of the Rowan Core (i.e. in Non-Program Courses)
Broad-Based Literature (LIT) Designated Course	Optional program-specific requirement outside of the Rowan Core (i.e. in Non-Program Courses)

Because these requirements are not directly included in the proposed Rowan Core (as is Public Speaking), not redundant with the Core Literacy designations (as are Multicultural/Global and ACE), and not currently assessable under any of the adopted Literacy designations, this proposal cannot determine their final fate. The committee has herein made recommendations which appear consistent with the joint goals of the Rowan Core and Rowan Experience, but we also recommend that a separately charged committee develop a proposal to finalize their status with all practical speed.

Implementation date: TBD

II. DESCRIPTION & RATIONALE

A. Change 1: Creation of a Rowan Core Standing Senate Committee (RCSS Committee)

- To start during the Fall 2015 semester
- The Chair of the RCSS Committee will be a Senator and the RCSS Committee will report to the University Senate.
- Membership will consist of two faculty members from each of the following seven colleges:
  - College of Communication & Creative Arts
  - College of Education
  - College of Engineering
  - College of Humanities & Social Sciences
  - College of Performing Arts
  - Rohrer College of Business
  - College of Science and Mathematics
- Responsibilities include:
  - Recommending selection of the RC Director
  - Consulting with departments regarding potential RC course offerings
  - Reviewing curriculum proposals and attending open hearings for new and existing courses seeking inclusion within the RC.
  - Evaluating the assessment outcomes submitted by departments for their RC courses
  - In the interest of teaching students to draw connections among the six Literacies (Artistic, Communicative, Global, Humanistic, Quantitative, and Scientific: see appendix for complete Literacy narratives) and to apply the skills obtained through the study of multiple Literacies to problem-solving, the RCSS Committee will have an ongoing commitment to the creation and implementation of a "Multi-Literacy" designation (see below).
  - In the interest of specifically targeting the Learning Goals falling under the "Students will engage their learning by" category of each of the six Literacies, the RCSS Committee will have an ongoing commitment to the creation and implementation of an "Experiential Learning" designation (see below).

B. Change 2: Establishment of a Rowan Core Director (RC Director)

- To start in Spring 2016
- This will be a tenured faculty member, with 9 SH of released time per fall and spring semester and 3 SH summer compensation, recommended by the RCSS Committee and approved by the Provost.
- The RC Director will report to the Provost's Office.
- Secretarial staff and office space are required.
- Responsibilities include:
  - Development and coordination of workshops to train faculty in RC course development and assessment
  - Reviewing curriculum proposals and scheduling and attending open hearings for new and existing courses seeking inclusion within the RC. Once passed by the RCSS

Committee and approved by the RC Director, the University Senate Curriculum Chair will have final curricular approval.
- Oversight, coordination and compilation of assessment efforts
- Playing an integral part in the creation and implementation of a "Multi-Literacy" designation, including scheduling of and staff recruitment for RC Multi-Literacy courses (see below)
- Playing an integral part in the creation and implementation of an "Experiential Learning" designation (see below).
- Liaise with community colleges regarding issues of general education.

C. Change 3: Replacing General Education bank requirements with the new Rowan Core

1. Curriculum and assessment process and guidelines:

a. Identification of potential RC courses:
- As a first step, by September 30, 2015, all departments should submit a list of potential RC courses (both existing and new) and the corresponding sought-after Literacy designation (i.e. Scientific Literacy, Quantitative Literacy, etc.) to the University Senate President, who will share these with the RCSS Committee in Fall 2015.
  - During the Fall 2015 semester, the RCSS Committee will then examine the departmental lists for the purpose of addressing any anticipated curricular problems or gaps and communicate with the relevant departments. For example, programs within the College of Engineering might request that the Math Department submit particular courses for inclusion within the RC in order to avoid the need to require additional Quantitative Literacy credits for Engineering students.
  - Depending on the number of potential RC courses for a given department, individual faculty members may request 3 SH of released time for exceptional service for the Spring 2016 semester, for the purpose of writing (and revising) RC curriculum proposals.

b. Submitting RC curriculum proposals:
- Starting with the Spring 2016 semester, proposals may be submitted for both new and existing courses to be included within the RC.
- All RC courses will carry one Literacy designation only[1] and all transfer courses equivalent to RC courses will be considered to satisfy the same Literacy designations.
- In order to gain a Literacy designation, proposals for both new and existing courses must address how the course satisfies each of the four Learning Goals areas described within the respective Literacy narrative; within each Literacy narrative, these four areas are titled, "Students will know", "Students will

[1] When the Multi-Literacy designation is implemented, courses with the Multi-Literacy designation will carry this designation only and will not also carry single Literacy designations.

understand", Students will appreciate" and "Students will engage their learning by".

- Proposals for the acquisition of a Literacy designation for both new and existing courses must also address how corresponding Learning Outcomes will be satisfied and assessed. The Learning Outcomes listed within each Literacy narrative are not exhaustive; specific proposals may describe Learning Outcomes in addition to those included within each Literacy narrative. Additional Learning Outcomes must be consistent with the Learning Goals of the corresponding Literacy.
- College Composition I, College Composition II, Public Speaking and all courses considered equivalent to these three, which will replace one or more of these three, such as Sophomore Engineering Clinic I (ENGR 01.201 - equivalent to College Composition II) and Sophomore Engineering Clinic II (ENGR 01.202 - equivalent to Public Speaking), are automatically granted the Communicative Literacy designation. Curriculum proposals for College Composition I, College Composition II, Public Speaking and all equivalent courses will only need to address how corresponding Communicative Literacy Learning Outcomes will be satisfied and assessed. Courses developed as Communicative Literacy equivalents of these three courses for use in other programs (or for offering to the wider University community) will be required to follow the same approval procedure as with the other literacy designations.
- Departments and programs are free under this model to develop and propose courses that address and assess any literacy. It is, of course, incumbent upon departments and programs that are developing courses whose literacies naturally overlap significantly with those offered by other programs to consult carefully and fully during the development and approval process. Courses with significant overlap should generally be developed only when there is clear evidence that a given literacy cannot be substantially met via an existing offering. In such cases, the RSCC Committee will be tasked with assessing both the inadequacy of existing offerings and the ability of the proposing department or program to offer and assess a course which may fall outside of natural disciplinary boundaries.

c. Periodic assessment of RC courses:
   - Initially, for all RC courses, at least one Learning Outcome must be assessed once every two years and reported to the RCSS Committee. The RCSS Committee may choose to revisit both the number of Learning Outcomes assessed and the cycle for assessment.
     - College Composition I, College Composition II, Public Speaking and all courses considered to be equivalent to these three must satisfy the same assessment requirement as courses carrying the Communicative Literacy designation.
   - If the RCSS Committee determines that the targeted Learning Outcome is not being met for a particular RC course, a plan must be submitted by the end of the following semester, either for alteration of the course, with the goal of satisfying the targeted Learning Outcome, or for a new Learning Outcome and assessment mechanism; the revisions and new assessment will be included in the following

assessment report, submitted two years after the submission of the previous report.
    - The authors of the assessment report may appeal the outcome of the RCSS Committee and pursue the matter with the Learning Outcomes Assessment Committee.

d. Approval of Rowan Core proposals:
    - RC proposals not approved by the RCSS Committee will require revision and resubmission.
        - Proposal sponsors may appeal the disapproval of the RCSS Committee and request that their proposal be reviewed by the University Senate Curriculum Committee.
    - RC proposals approved by the RCSS Committee proceed to the RC Director, who must review the proposals and write a letter of consultation.
        - Proposals that have received positive letters of consultation from the RC Director then proceed to the University Senate Curriculum Committee Chair for final approval.
        - Proposals that have received negative letters of consultation, indicating a lack of support from the RC Director, then proceed to the University Senate Curriculum Committee for further review if appealed by the proposal sponsors.

2. Rowan Core course structure and requirements:

a. Initially, the Rowan Core will consist of the following courses, totaling 24 SH; any of these may be fulfilled within a major program:
    - College Composition I (3 SH)
    - College Composition II (3 SH)
    - Public Speaking (3 SH)
    - Artistic Literacy course (3 SH)
    - Global Literacy course (3 SH)
    - Humanistic Literacy course (3 SH)
    - Quantitative Literacy course (3 SH)
    - Scientific Literacy course (3 SH)

The above 24 SH will be required of all undergraduate programs; however, courses considered to be equivalent to College Composition I, College Composition II and Public Speaking may be substituted for these three courses. For example, at present, Sophomore Engineering Clinic I (ENGR 01.201) is considered as equivalent to College Composition II and Sophomore Engineering Clinic II (ENGR 01.202) is considered as equivalent to Public Speaking. College Composition I, College Composition II, Public Speaking and all courses considered equivalent to these three are automatically granted the Communicative Literacy designation.

Additional Communicative Literacy courses may be proposed and used to fulfill program-specific requirements, for example, within non-program electives.

Transfer students must also satisfy all six Literacy designations and transfer courses will be accepted in satisfaction of RC Literacy designation requirements where equivalent.

Eventually, the Rowan Core will include a "Multi-Literacy" designation and an "Experiential Learning" designation; depending on the outcomes of the future work on these two new designations accomplished by the RCSS Committee, these two additional elements may add to the total number of credits for the Rowan Core.

b. Multi-Literacy designation:
In the interest of teaching students to draw connections among the six Literacies and to apply the skills obtained through the study of multiple Literacies to problem-solving, the RCSS Committee will have an ongoing commitment to the creation and implementation of a Multi-Literacy designation, to be included within the Rowan Core. Multi-Literacy courses would provide a vital aid in students' understanding of the overall goals of the Rowan Core and the importance of the various Literacies to their lives and chosen careers.

The development of Multi-Literacy courses in the Rowan Core appears particularly appropriate given the University's increased emphasis on collaborative research efforts. In the same way that many courses are informed by the research interests of the faculty member teaching them, Rowan faculty already engaged in collaborative research across disciplines would be able to add a variety of new and greatly beneficial courses to the curriculum. Conversely, faculty who engage in the development of such courses may very well find fertile new ground for collaborative research efforts which do not yet exist on this campus. Finally, the stimulation of conversations regarding pedagogy among faculty in disparate disciplinary areas that should accompany the development of these courses could only help to further integrate the Rowan community.

The RCSS Committee will first need to conduct a detailed investigation of the possibilities for and the appropriateness of implementing (and growing) the Multi-Literacy designation. Following this investigation, a first curriculum proposal will be submitted by the RCSS Committee in Spring 2017 for the inclusion of the Multi-Literacy designation within the Rowan Core. The initial proposal will include the following:

- A set of appropriate Learning Goals and assessable Learning Outcomes, similar in format to those of the Literacy narratives (Artistic, Communicative, Global, Humanistic, Quantitative, and Scientific)
    - Coverage and assessment of the different Learning Goals and Learning Outcomes for the individual Literacies would not be the primary focus for the Multi-Literacy courses; rather, the abilities of the students to integrate learning across the Literacies and to engage with them as appropriate to the problem at hand are what should be assessed.

- A rationale for either requiring, or making optional, the Multi-Literacy designation for all, or some subset of Rowan University students. Possibilities for implementation considered by the RCSS Committee could include such outcomes as the following **(these examples are to be considered only conjectural possibilities)**:
    - The RCSS Committee may determine, for example, that the Multi-Literacy designation will be required for all Rowan University students.
    - The RCSS Committee may determine, for example, that the Multi-Literacy designation will be required for B.A. (or B.S.) students only.
    - The RCSS Committee may determine, for example, that the Multi-Literacy designation will be required for the students of particular colleges only, such as the College of Humanities and Social Sciences.
    - The RCSS Committee may determine, for example, that the Multi-Literacy designation will be optional for all Rowan University students, as a possible replacement for another Rowan Core requirement, such as the Experiential Learning designation.
    - The RCSS Committee may determine, for example, that the Multi-Literacy designation will be a 6 SH requirement/option.
    - The RCSS Committee may determine, for example, that the Multi-Literacy designation will be a 3 SH requirement/option.
    - The RCSS Committee may determine, for example, that Multi-Literacy courses should include two, three, four, five, or all six of the different Literacies.
        - Multi-Literacy courses incorporating elements of all six existing Literacies could examine a single problem or a narrowly focused set of problems. The teaching of broad themes might require an integrated two-semester sequence for adequate coverage. Example problems could include (but are not limited to):
            - Understanding the nature of creativity and genius
            - Understanding and appreciating the full scope of human diversity
            - How sustainability is best defined and achieved in the modern world
        - Multi-Literacy courses could focus narrowly on two Literacies, with one of the Literacies being of primary importance in the student's chosen discipline and the other used in examining the discipline from an outsider's perspective. For example, several of the science departments currently require Philosophy of Science for all majors. Also, discipline-specific communication courses (e.g. Writing in the Humanities) would likely be of great interest and utility to many major programs.

c. Experiential Learning designation:
As mentioned above, in the interest of specifically targeting the Learning Goals falling under the "Students will engage their learning by" category of each of the six Literacies (Artistic, Communicative, Global, Humanistic, Quantitative, and Scientific), the RCSS Committee will have an ongoing commitment to the creation and implementation of an Experiential Learning designation, to be included within the Rowan Core. This Experiential Learning designation will primarily be applied to

Rowan-approved, out-of-classroom and off-campus learning experiences, such as study abroad, faculty-led study abroad, internships, service learning, volunteerism, clinical practice, etc. At present, in general, there is little or no incentive for Rowan students to participate in such important, hands-on learning experiences. As participating in these types of Experiential Learning activities will undoubtedly enrich the education of Rowan students, benefit the Rowan University Community, benefit the wider community, and make Rowan graduates stronger job candidates, the RCSS Committee will first need to conduct an investigation regarding both the limits of what types of experiences should fall under this designation and the most appropriate way(s) to incentivize these experiences for our students. Following a detailed investigation of the possibilities for and the appropriateness of implementing (and growing) the Experiential Learning designation, a first curriculum proposal will be submitted by the RCSS Committee in Spring 2017 for the inclusion of the Experiential Learning designation within the Rowan Core. As is the case with all curriculum proposals, the initial proposal may be approved or not; if the first proposal is not approved, the RCSS Committee will continue to revise and resubmit, until some form of implementation of the designation is approved. The initial proposal will include the following:

- A set of appropriate Learning Goals and assessable Learning Outcomes, similar in format to those of the Literacy narratives (Artistic, Communicative, Global, Humanistic, Quantitative, and Scientific)
- A rationale for either requiring, or making optional, the Experiential Learning designation for all, or some subset of, Rowan University students. Possibilities for implementation considered by the RCSS Committee could include such outcomes as the following **(these examples are to be considered only conjectural possibilities)**:
    - The RCSS Committee may determine, for example, that Experiential Learning will be a required designation for all Rowan University students.
    - The RCSS Committee may determine, for example, that Experiential Learning will be a required designation for B.A. (or B.S.) students only.
    - The RCSS Committee may determine, for example, that Experiential Learning will be a required designation for the students of particular colleges only, such as the College of Humanities and Social Sciences.
    - The RCSS Committee may determine, for example, that Experiential Learning will be optional for all Rowan University students, as a possible replacement for another Rowan Core requirement, such as taking a Multi-Literacy course.
    - The RCSS Committee may determine, for example, that Experiential Learning will be a 3 SH requirement/option.
    - The RCSS Committee may determine, for example, that Experiential Learning will be a 0 SH requirement/option.

d. Fulfillment of the Global Literacy requirement via enrollment in Study Abroad programs:

Many of the Learning Goals of the Global Literacy may be addressed, either in an intentional manner or as a byproduct of the experiences obtained, during a student's engagement in a Study Abroad program. The Rowan University International Center is currently engaged (in conjunction with other New Jersey higher educational institutions) in developing a mechanism to assess the experiences of students after the completion of study abroad. This assessment tool is anticipated to be completed by the end of December 2015.

When this assessment tool is complete, the RSCC Committee should work with the International Center to gauge the suitability of this assessment for use in assessing the goals and learning outcomes of the Global Literacy. If appropriate, this assessment may be able to be used directly to grant students credit for fulfillment of the Global Literacy requirement. It may also be possible that the RSCC Committee could work with the International Center to modify the new assessment process to judge more accurately the specific goals and outcomes of the Global Literacy.

D. Change 4: Modifications to Rowan Experience Requirements (table repeated below)

From:	To:
Public Speaking (CMS 04205) (or its equivalent)	Public Speaking (CMS 04205) (or its equivalent)
Artistic and Creative Experience (ACE) Designated Course	Replaced by the Artistic Literacy Designated Course requirement within the Rowan Core
Multicultural/Global (M/G) Designated Course	Replaced by the Global Literacy Designated Course requirement within the Rowan Core
In-Class Laboratory (LAB) Designated Course	Optional program-specific requirement outside of the Rowan Core (i.e. in Non-Program Courses)

1. **Public Speaking (CMS 04205):**
   Public Speaking (CMS 04205) or its equivalent, such as Sophomore Engineering Clinic II (ENGR 01.202), is maintained as a requirement within the new Rowan Core, under Communicative Literacy.

2. **Artistic and Creative Experience (ACE) replaced by Artistic Literacy:**
   The goals and outcomes of this designation are redundant with those specified for the Artistic Literacy. In Fall 2017, once the Rowan Core is required of all incoming freshmen and transfer students, the Artistic and Creative Experience (ACE) requirement will be replaced by the new Rowan Core requirement to take one Artistic Literacy Designated Course.

3. **Multicultural/Global Designated Course (M/G) replaced by Global Literacy:**
   The goals and outcomes of this designation are redundant with those specified for the Global Literacy. In Fall 2017, once the Rowan Core is required of all incoming freshmen and transfer students, the Multicultural/Global (M/G) requirement will be replaced by the new Rowan Core requirement to take one Global Literacy Designated Course.

4. **In-Class Laboratory (LAB) Designated Course as optional, program-specific requirement:**
   In the absence of any upcoming curriculum proposal to the contrary, in Fall 2017, once the Rowan Core is required of all incoming freshmen and transfer students, the In-Class Laboratory (LAB) requirement will no longer be in effect university-wide. However, specific programs may choose to require an In-Class Laboratory (LAB) course, for example within Non-Program Courses. Those seeking to gain In-Class Laboratory (LAB) designation for a course may continue, as at present, to submit a curriculum proposal to the University Senate Curriculum Committee.

   There are currently no specifically assessable outcomes associated with the LAB designation, and a proposal seeking to reinstate the In-Class Laboratory (LAB) requirement university-wide and align it with the Rowan Core would thus need to develop Learning Goals and Learning Outcomes, similar to those within the Literacy narratives. Those interested in having a course gain the In-Class Laboratory (LAB) designation would need to address how the course will fulfill the Learning Goals and how assessment will be carried out based on the Learning Outcomes.

   This change will enable programs to develop and offer new or existing courses which fulfill the new Scientific Literacy designation without any constraints as to whether or not an associated LAB designation is also required. From a curricular standpoint, some current or potentially proposed course offerings could adequately address and assess the Learning Goals and Learning Outcomes for the Scientific Literacy designation without a laboratory component.

III. TIMELINE

- September 30, 2015: Deadline for departments to submit a list of potential RC courses and the corresponding sought-after Literacy designation to the University Senate President.
- Fall 2015: The Rowan Core Standing Senate Committee (RCSS Committee) is formed, selects an RC Director for recommendation to the Provost, and consults with departments regarding potential RC course offerings.
- Spring 2016: The Rowan Core Director (RC Director) assumes his/her position. Faculty members receive released time to write, submit and revise RC curriculum proposals for new and existing courses to obtain a single-Literacy designation.
- Fall 2016: The RCSS Committee conducts investigations for the creation and implementation of a Multi-Literacy designation and an Experiential Learning designation within the Rowan Core.
- Spring 2017: The RCSS Committee submits two curriculum proposals, one for the Multi-Literacy designation and one for the Experiential Learning designation.
- By Spring 2017, departments must submit curriculum proposals for changes to program requirements, resulting from the implementation of the Rowan Core.
- The Rowan Core will be required of all incoming freshmen and transfer students in Fall 2017.

APPENDIX

The Rowan Core Literacies
Definitions, Learning Goals and Learning Outcomes

Artistic Literacy

Artistic literacy is the knowledge and understanding of the centrality of the arts and aesthetics to human existence. Art reflects, and artists respond to and interact with, their communities. Artistic literacy requires learning about and engaging in the creative and performing arts. Visual, verbal, physical and auditory expression will be informed by a study of historical and cultural contexts. Active experimental engagement, including critical analysis and evaluation, will foster an aesthetic sensibility, which includes cognitive and emotional responses.

Learning Goals
Students will know:

- Vocabulary, practitioners, and various styles, genres, and traditions
- Historical foundations, ideological dimensions and cultural practices
- Practical techniques of expression and the creative process
- Professional and academic standards in the arts

Students will understand:

- The relationship of the arts to self and society
- The interdependent relationship of artists and audiences
- The innovative nature of the creative process
- How the body, voice, and mind can be used to express ideas
- The role of critical theory in the arts
- How art is a driver and product of culture
- The range of artistic contributions, such as “popular” or “high” art

Students will appreciate:

- The value of an aesthetic sensibility
- The role of the arts in society
- The ideological potential of art, e.g., as a means of social protest or political oppression

Students will engage their learning by:

- identifying and describing various forms of artistic expression
- Making and justifying aesthetic judgments
- Critiquing various forms of expression that are rooted in diverse cultures, value systems, or historical contexts
- Applying and practicing foundational creative techniques, such as visual, verbal, physical and auditory expression

Learning Outcomes

1. Students can use vocabulary related to and names of practitioners of various styles, genres, and traditions.
2. Students can describe historical foundations, ideological dimensions and cultural practices.
3. Students can discuss professional and academic standards in the arts.
4. Students can explain the relationship of the arts to self and society (e.g., the interdependent relationship of artists and audiences; how art, ranging from popular to high art, is both a driver and product of culture).
5. Students can demonstrate how the body, voice and mind can be used to express the creative process.
6. Students can describe the role of critical theory in the arts.
7. Students will experience firsthand and reflect on works of art and artistic performances in several different genres.
8. Students will critique (i.e., describe, analyze, interpret, judge) various forms of expression that are rooted in diverse cultures, values systems, or historical contexts.
9. Students will apply and practice foundation creative techniques, such as visual, verbal, physical and auditory expression, through the creation of an original product or performance.

Communicative Literacy

Communicative literacy is the capacity to analyze, reflect on, and respond to diverse communication situations. This includes understanding the ways in which audience, context, and purpose shape acts of communication. Communicative literacy is demonstrated through fluency in various modes of communication and effective adaptation, invention, and choice of strategies for communication. Engagement in a range of communicative acts and experiences will cultivate critical awareness and ethical responsibility.

Learning Goals
Students will know:

- Critical reading and listening skills
- Standards and conventions of written and spoken discourse
- Research and citation skills within academic and nonacademic forums
- Information and communication technologies
- Diverse genres, styles, and strategies

Students will understand:

- How to be receptive as a reader and listener to new information and knowledge
- How individual perspectives affect the reception, interpretation and performance of communicative acts
- How self and community are situated within various communicative contexts, such as the social, the political, the personal, and the civic
- How purpose, audience, and context shape communication
- How language and cultural perceptions shape, construct, and negotiate reality

- How appropriate communication is defined by social groups or contexts through the use of genres, practices, and conventions
- How new media are revolutionizing communication

Students will appreciate:

- The creative power of language to shape reality (attitudes, actions, knowledge) in multiple forms
- The agility and knowledge required to respond to diverse communication situations
- The limits and possibilities of language use within particular social and material contexts
- The challenges of translation and comprehension
- The importance of intelligibility, purpose, and fluency in all communication forms

Students will engage their learning by:

- Transferring their understanding of effective written, oral, and nonverbal communication to all of their courses
- Practicing their communicative literacy skills in both academic and non-academic settings
- Taking responsibility for using language ethically, understanding that language is a powerful tool with social and material dimensions, functions, and consequences
- Critically analyzing how different modes of communication are constructed, meditated and moderated

Learning Outcomes

1. Students can compose texts that successfully respond to a variety of rhetorical situations and needs.
2. Students can investigate, discover, evaluate and incorporate information and ideas to create rhetorically adept messages
3. Students can create messages in a variety of formats, modes, and genres, including visual and digital modes.
4. Students can articulate their rhetorical choices/strategies in response to the needs and expectations of audience, context, and purpose.
5. Students can identify and evaluate various format, modes, and genres of communication within their social context.
6. Students can identify, analyze, and evaluate the rhetorical strategies of complex texts.
7. Students will produce and analyze complex texts (written, oral and nonverbal) for a variety of purposes and demonstrate their understanding of rhetorical strategies, genres, and discourse community expectations, and well as the effect of evolving digital technologies on communication.
8. Students will investigate, discover, evaluate and incorporate information and ideas to create authentic messages.
9. Students will explain how different forms of communication are culturally constructed, meditated, and moderated and how their value and effects are situate din the global, the political, the social, the civic, and the personal.

Global Literacy

Global literacy is the ability to understand the complexities of one's own society as well as the global community. This requires knowledge of the diversity of world cultures and recognition of the interdependence of the contemporary world. The extensive globalization of the world's economies and societies reveals the limits of human and natural resources in a global context. Knowledge of the reciprocal nature of local and global conditions will produce an international perspective. Engagement will occur through the traditional curriculum as well as high impact, experiential learning, such as Study Abroad, internships, service, and other methods of active community engagement.

Learning Goals

Students will know:

- The interconnectedness and interdependencies of the global community
- The issues regarding environmental, social and economic sustainability
- The social and cultural differences that influence individuals' lived experiences as members of communities
- The multiple avenues for civic engagement

Students will understand:

- Their perspective, rights and obligations as members of multiple communities
- The connections among the self, the local community and the global community
- How sustainability issues are embedded in disparate social, cultural, ecological, and economic milieus
- The costs and benefits of globalization
- Why solutions to many of today's problems are often borderless
- How culture shapes one's world view

Students will appreciate:

- How diversity in gender, race/ethnicity, ability, status, sexual orientation, national origin, etc. impacts individuals' differing lived experiences
- The value of civic engagement for the individual and for the community
- The growing internationalization of human experience
- The complex interdependencies of world economies and societies
- The interplay between cultural traditions and the increasing standardization of the global community
- The pervasiveness and importance of technology and its impact on global communities
- The history, literature, language, arts and cultures of other societies

Students will engage their learning by:

- Participating as builders and active members of multiple communities
- Engaging in international experiences (such as Study Abroad, study of foreign languages and cultures, service learning in an immigrant community, internationally focused co-curricular activities, etc.)

- Analyzing and reflecting upon social justice, multiculturalism, sustainability, and diversity in both local and international contexts

Learning Outcomes

1. Students can demonstrate civic engagement by active participation and reflection.
2. Students can express their knowledge and understanding of another culture.
3. Students can describe connections between local and global communities.
4. Students can communicate their understanding of sustainability in social, cultural, ecological and/or economic milieus, both locally and globally.
5. Students can express connections between the self and community.
6. Students can explain the costs and benefits of globalization.
7. Students will reflect critically on their own cultural experiences, cross-cultural interactions, and the diverse cultural experiences of others.
8. Students will use comparative thinking to understand local/global connections in contemporary society on arrange of cultural, political, economic and environmental issues.
9. Students will describe and appraise their civic engagement as active members and builders of multiple communities.

Humanistic Literacy

Humanistic literacy is the ability to understand how human experience is shaped by economic, political, literacy, socio-cultural, historical and other contexts. Humanistic literacy includes critical awareness of how dominant paradigms are created and shape human thinking and feeling. It also encompasses the ability to empathize with other times, places, cultures, and mindsets and to grasp the complexity of change and perspective. Active engagement involves the study ad interpretation of significant texts and artifacts to develop awareness and to use this awareness to make decisions and to initiate and react to change.

Learning Goals

Students will know:

- Human commonalties and differences as represented by histories, literary traditions, philosophical and religious viewpoints, and political and economic systems around the globe and throughout human history
- The major developments in human history and thought that led to the complex modern world

Students will understand:

- How the basic concepts/paradigms of major disciplines provide context for diverse interpretations of the present and past
- Intellectual and social dimensions of human experience in local and global contexts
- The impact of geographic, ecological, political, economic, and socio-cultural contexts on human experience and activity

Students will appreciate:

- The complexity of any historical moment, including the present, is a product of multiple, interacting forces within economic, political, geographic, socio-cultural, and other contexts
- That continuity and change as inherent to human experience
- That understanding the past takes into account knowing the values and culture of a particular time and place
- That intellectual inquiry generates debate and controversy, often leading to new perspectives

Students will engage their learning by:

- Studying texts and artifacts that reflect the concerns and experiences of the intellectual moment in which they were created
- Interpreting these texts and artifacts in light of a variety of theoretical and critical perspectives while demonstrating an understanding that no absolute "truth" exists in such interpretive efforts
- Using sound reason to evaluate claims, assess evidence, and guide decision making.

Learning Outcomes

1. Students can identify and describe major developments in human history and thought.
2. Students can identify major commonalities and differences in human societies.
3. Students can analyze and explain the factors, events, and developments that led to the contemporary world.
4. Students can locate and explain how basic concepts and/or paradigms of different disciplines can provide context for diverse interpretations of a present or past event.
5. Students can incorporate intellectual and social dimensions of human experience into an analysis of local and global contexts.
6. Students can explain the impact of geographic, ecological, political, economic, and socio-cultural contexts on human experience and activity.
7. Students will analyze the context and significance of a particular intellectual moment (e.g., prepares a debate or position paper).
8. Students will interpret texts and/or artifacts through multiple perspectives.
9. Students will evaluate claims, assess evidence, and exercise ethical standards to build a coherent argument on an event or topic.

Quantitative Literacy

Quantitative literacy is the ability to reason logically and to communicate mathematical ideas verbally, symbolically, and graphically. It means knowing fundamental concepts and techniques of mathematical principles and processes in order to see mathematical functions as quantitative relationships, to understand the concept of probability, and to estimate or approximate answers to questions. This knowledge provides a foundation for understanding how to construct logical arguments and how to make use of mathematical thinking. Quantitative literacy encourages appreciation of mathematics as a practical tool as well as a philosophical and humanistic endeavor which helps to understand the world. Engagement in quantitative literacy includes

analysis of the use of mathematics and the application of mathematical thinking and modeling to real-world problems.

Learning Goals
Students will know:

- Fundamental functions and relational thinking
- Analytical thinking—how functions change as underlying parameters change
- Algorithmic thinking—being able to model a "real-world" problem as a "math-world" problem
- Computational thinking—how to solve complex problems through iterative processes
- Basic descriptive statistics (definitions, concepts)
- The distinction between continuous and discrete quantities (analog v. digital; real numbers v. natural numbers, measurable v. countable)

Students will understand:

- How to construct a complete, logical argument in quantitative terms
- Mathematical modeling as a representation of reality that can be evaluated based on its usefulness
- Applications and limitations of computational and statistical reasoning
- The difference between correlation and causality
- Quantitative and logical reasoning

Students will appreciate:

- Mathematics as a philosophical abstraction
- The contribution of quantitative reasoning to human innovation and progress

Students will engage their learning by:

- Communicating mathematical ideas in symbolic, graphic, oral and written forms
- Evaluating the appropriateness and limitations of quantitative models of real-world situations
- Applying algorithmic thinking to solve quantitative, real-world problems
- Assessing the claims of others and make informed decisions about issues related to probability

Learning Outcomes

1. Students can define basic statistical and regression vocabulary and also qualitatively describe the meanings relative to a set of given data (e.g. mean vs. median, what does the standard deviation represent; correlation coefficients, and model parameters/coefficients)
2. Students can outline a logical solution to complex real-world problems through simplification to a mathematical model.
3. Students can describe the differences between continuous (e.g. measureable) and discrete (e.g. countable) quantities and how this affects how they can be analyzed.
4. Students can perform basic statistical and regression analyses on data and also qualitatively describe the meaning of the results (e.g. how they change as new data

are added, limits of regression models and how they can infer correlation and/or causality).
5. Students can solve complex real-world problems through simplification to a mathematical model and then discuss how that model is affected by adding back in ignored complexities.
6. Students can perform basic analyses on both discrete and continuous data.
7. Students will communicate mathematical ideas in symbolic, graphic, oral and written forms.
8. Students will evaluate the appropriateness and limitations of deterministic and probabilistic models to make informed decisions in real world situations.
9. Students will apply algorithmic thinking to solve quantitative, real world problems.

Scientific Literacy

Scientific literacy is the understanding that science is systematic, evidence-based process of observation, modeling, and testing, to formulate and refine theories which not only explain but predict. Scientific literacy encompasses an appreciation of the role of science in society, technology, engineering, and mathematics. It includes recognition of the scientific knowledge, skills and values that promote informed evaluation of the validity of claims and proposed solutions to current problems. Scientific literacy does not necessarily involve the production of new science but rather it enables one to informed decisions and cooperative engagement in the protection and improvement of the world through scientific processes.

Learning Goals
Students will know:

- Basic working definitions and vocabulary
- Universal unifying concepts in science
- Scientific skills including critical observation, objective analysis, measurement, estimation, and analyzing uncertainties (scientific error)

Students will understand:

- How science uses specific processes to yield accepted results
- How science uses models (simplifications) to represent the world and how these models are evaluated as a function of their usefulness
- The difference among fact, hypothesis, and theory
- That the world is a collection of explainable phenomena and that it is possible to identify what is not yet known
- The importance of science in formulating public policy

Students will appreciate:

- The concept that learning science requires doing science
- Science is a human process, with a history and social context
- The value of science for understanding the natural world and improving the human condition
- That scientific conclusions must be informed by scientific evidence resulting from a

systematic process of inquiry and reflective practice
- The value of a healthy, informed inquiry
- The accessibility of scientific knowledge and skills

Students will engage their learning by:
- Solving problems and making decisions in systematic ways by collecting and analyzing data to verify or falsify a hypothesis and by using evidence to distinguish between competing hypotheses
- Communicating scientific information effectively
- Being informed consumers of science

Learning Outcomes
1. Students can demonstrate the ability to conduct scientific measurement and to discuss its limitation due to scientific error/uncertainty.
2. Students can conduct directed experiments including set-up, data collection, data analysis, and interpret results to either "discover" or verify scientific theory.
3. Students can demonstrate knowledge of core ideas and vocabulary of science and the scientific method in written and/or oral work.
4. Students can describe how to design an experiment to test competing hypotheses by manipulating and controlling variables.
5. Students can identify and explain a modern example of public policy drawing on scientific evidence.
6. Students can discuss the utility and limitations of scientific models.
7. Students will conduct, critique and design scientific studies following the standard scientific method.
8. Students will compose and critique scientific arguments as presented in both popular media and scientific literature as well as compose their own.
9. Students will apply scientific data to solve a real-world problem.