Appendix
Contextual Information on Carolina Core Learning Outcomes

Posted October 13, 2009; Revised Feb 8, 2011; Revised August 2011; Revised February 2014

I. Aesthetic and Interpretive Understanding

<table>
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<tr>
<th>Core Component</th>
<th>Learning Outcome</th>
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<tr>
<td>Aesthetic and Interpretive Understanding</td>
<td>Upon completion of the Carolina Core, students will be able to create or interpret literary, visual or performing arts.</td>
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**Context:** The pleasure that comes from informed appreciation of artistic works and performances is crucial to the quality of an educated life. It leads to a deeper, more fully imagined sense of the human condition, sustains an openness to lifelong learning, and helps to foster understanding across cultural divides, encouraging full participation in the cultural life of society.

University of South Carolina students may demonstrate their understanding of the arts in a number of ways, whether by creating literary, visual, or performance art, or by studying diverse traditions and interpreting existing works.

**Foundational courses** that support this learning outcome provide students opportunities to study and create works of literature and/or visual or performance art, analyze creative works and practice analysis skills, or discuss artistic or literary periods or styles and practice discussion skills.

A Carolina Core **integrative course** in the major might, for example, require students to demonstrate understanding of the relationship of the arts to the political culture of a country or region.

Students who achieve this learning outcome will be able to do one or more of the following:

1. Create works of literary, visual, or performance art that demonstrate proficiency in a specific area of specialization.
2. Analyze works of literary, visual, or performance art with regard to style, period, and composition.
3. Discuss specific artistic periods or styles with regard to history, development, and major practitioners.
II. Analytical Reasoning and Problem-Solving

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<td>Analytical Reasoning and Problem-Solving</td>
<td>Upon completion of the Carolina Core, students will be able to apply the methods of mathematics, statistics, or analytical reasoning to critically evaluate data, solve problems, and effectively communicate findings verbally and graphically.</td>
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**Context:** Many of the complex problems facing individuals, families, organizations, communities, and society require both qualitative and quantitative analyses and responses. University of South Carolina students must be able to employ both qualitative and quantitative methods to recognize, analyze, and solve problems, and communicate findings and solutions verbally, symbolically, and visually.

Students must understand and apply, as appropriate, principles of analytical reasoning using as a foundation the knowledge of mathematics, statistics, logic, and/or algorithmic principles. They must be able to recognize and use connections among mathematical, logical, statistical, and algorithmic methods across disciplines. They must develop skills in identifying and describing problems using quantitative data and models, elucidating relationships among variables for descriptive or predictive purposes, distinguishing relevant from irrelevant data, evaluating the authority and accuracy of information, and assessing the appropriateness of quantitative methods for the available data. Ultimately, decisions must be made and defended through effective means of communication.

**Foundational courses** that support this learning outcome teach students how to do some of the following: use analytical reasoning with appropriate technology to solve problems; test conjectures; formulate valid arguments; judge the validity of arguments; check answers to determine reasonableness; reflect on both the statistical and practical significance of findings; and communicate the reasoning and the results.

In a Carolina Core **integrative course** in the major, students might demonstrate, for example, the ability to distinguish relevant from irrelevant information, identify missing and faulty information, and determine appropriate and inappropriate means for gathering data and making inferences. Students might apply advanced methods to evaluate evidential and argumentative claims and propose solutions to complex problems.

Students who achieve this learning outcome will be able to:
1. Demonstrate understanding and use of the basic principles, concepts, and terms of the discipline.

2. Identify a problem and define associated variables, expressing quantitative relationships among the variables.

3. Apply basic quantitative methods and analytical reasoning principles to evaluate and solve problems, using appropriate technologies.

4. Evaluate, interpret, and describe data from a variety of sources and in a number of forms (numbers, tables, graphs, and equations.)
III. Effective, Engaged, and Persuasive Communication

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<td>Effective, Engaged, and Persuasive Communication</td>
<td>Upon completion of the Carolina Core, students will be able to identify and analyze issues, develop logical and persuasive arguments, and communicate ideas clearly for a variety of audiences and purposes, through writing and speaking.</td>
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**Context:** University of South Carolina students must be able to think critically, and to read, write, inquire, and converse as citizens in a diverse, democratic society. They must be able to identify and use appropriate technologies, genres, and media to communicate ideas to varied audiences in ways that are conventional as well as creative, informative as well as persuasive. And because communication is reciprocal, they must also be engaged, active listeners.

Students need these skills in order to address issues of public concern, both to South Carolina and to a global society. They also need them to articulate personal values and experiences, and to communicate thoughts and feelings clearly in more intimate settings.

Students acquire these skills in foundational courses devoted to critical and expository writing and persuasive speaking. They build on them selectively in course work for the major, and may seek to refine them further, integrating them with selected other Carolina Core learning outcomes in an advanced level course.

A Carolina Core integrative course in the major might, for example, require students to write and speak effectively about the environmental impact of economic policies, or about the ethical and political questions raised by new and emerging technologies.

Students who achieve this learning outcome will be able to:

1. Identify and demonstrate appropriate means of communication for varied audiences and purposes.

2. Reason clearly in speaking and writing to inform, persuade, and exchange views.

3. Articulate a critical, informed position on an issue and engage in productive and responsible intellectual exchanges that demonstrate the ability to grasp and respond to other positions as well as to set forth their own.
IV. Global Citizenship and Multicultural Understanding

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<td>Global Citizenship and Multicultural Understanding</td>
<td>Upon completion of the Carolina Core, students will be able to:</td>
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<td>1. Use the principles of historical thinking to understand past human societies.</td>
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<td>2. Use the principles of the social sciences to explore diverse cultural identities and to analyze political and environmental issues.</td>
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<td>3. Communicate effectively in more than one language.</td>
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Overview of Core Component: University of South Carolina students must be aware of contemporary world issues, with an appreciation for the historical context as well as the natural, material, and socio-cultural forces that shape these issues. They must recognize and appreciate diversity as a characteristic of South Carolina, the nation, and the world, and understand self within that context. Such perspectives underlie the ability to interact effectively with people from diverse cultural backgrounds.

Learning Outcome 1: Context Statement revised August 2011

Students will be able to use the principles of historical thinking to assess the relationships between modern societies and their historical roots.

Context: University of South Carolina students engage in the study of history to gain a broader context for understanding local and global cultures. They must demonstrate an understanding of the methods of historical analysis, the techniques for enlisting a wide range of historical sources, and the application of historical frameworks to address contemporary questions and problems.

Foundational courses that support this learning outcome enable students to apply the principles of historical thinking to understand relationships between human societies and their historical roots.

Through a Carolina Core integrative course in the major, students might apply historical principles as a means to understanding and solving contemporary problems.

Students who achieve this learning outcome will be able to:
1. Identify and analyze the historical context, as well as the natural, material, and socio-cultural forces that shape human societies.

2. Apply historical principles and frameworks to interpret the past and its relationship to the present.

**Learning Outcome 2: Context Statement revised February 2011; August 2011**

Students will be able to use the principles of the social sciences to explore diverse cultural identities and to analyze political and environmental issues.

**Context:** The principles, methodologies, theories, applications, and knowledge base of the social sciences provide frameworks and insights for exploring the human condition. Drawing from interdisciplinary knowledge and methods, the social sciences offer a means for understanding the foundations of human behavior and societies, as well as social structures and interrelationships. Social scientific inquiry is a springboard for understanding and analyzing contemporary issues, from individual, local, and global perspectives.

University of South Carolina students must be able to explain social and behavioral phenomena and apply social scientific inquiry to define problems, construct and test hypotheses, draw conclusions, and communicate findings. They must engage with issues within and beyond U. S. borders as preparation for global citizenship.

**Foundational courses** that support this learning outcome enable students to apply social scientific inquiry and methods to address and analyze problems and issues.

A Carolina Core *integrative course* in the major might, for example, focus on the relevance of diverse cultural identities to the major field of study. The knowledge and skills drawn from study of the social sciences may be used to analyze political and environmental issues and person-environment interactions in the context of a specific field of study. Discipline-specific case studies, project-based learning, reaction papers, and video journals may be used across a variety of majors to extend competencies gained through study of the social sciences.

Students who achieve this learning outcome will be able to:

1. Apply social science methodology to define and analyze problems, draw conclusions, and communicate findings.

2. Draw from interdisciplinary knowledge and use theoretical frameworks to explain behavioral and social phenomena and think critically about local and global issues.

3. Demonstrate an understanding of how cultural diversity influences contemporary issues and shapes social behavior.
Learning Outcome 3:
Students will be able to communicate effectively in more than one language.

Context: The study of languages develops tools for global competency and provides a platform for understanding the traditions, cultures, and values of others. The ability to speak, write, and comprehend a second language alone is not sufficient for global competence but, when coupled with broad experience in the humanities, arts, and social sciences, it is a potent tool for investigating, comprehending, and responding to global issues and problems. Language study allows students to engage with cultures beyond their own, and to perceive their own culture through another’s perspective.

Foundational courses that support this learning outcome enable students to master essential language skills in the context of the culture that shapes and transmits the language.

A Carolina Core integrative course in the major might incorporate language and cultural study in a particular discipline area. Students might be expected to read specific disciplinary texts or portions of texts in a target language, participate in specifically designated discussion sections in a target language, or use a target language to conduct research. Students with more advanced level language skills might be expected to take disciplinary courses in a target language through study abroad.

Students who achieve this learning outcome will be able to:

1. Master basic reading, writing, listening, and speaking skills in a language other than English.

2. Demonstrate an understanding of the particular cultures that shape and transmit the language.
V. Information Literacy

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<td>Information Literacy</td>
<td>Upon completion of the Carolina Core, students will be able to collect, manage, and evaluate information using technology, and communicate findings.</td>
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**Context:** In order to make informed decisions as citizens, University of South Carolina students must be able to determine when information is needed. From the abundance of information available from many sources, students must then find, identify, understand, and critically evaluate information. Students must be able to use a variety of print and electronic materials and technologies to research and present findings on discipline-specific topics as well as those of concern to all citizens. Also, they must demonstrate an awareness of the responsibilities inherent in the acquisition, development, and utilization of knowledge.

Skills in information literacy are necessary for distinguishing information that is reliable, authoritative, and current from that which is biased, misleading, and out-of-date. Such skills prepare students to adapt to new and evolving sources of information and the technologies that create and support them. These are lifelong skills, important to both professional and personal life.

**Foundational courses** that support this learning outcome emphasize the research process and methods for using technology to locate, collect, manage, and present information from a variety of sources (e.g., print, electronic, experts.) In such foundational courses, students select topics, conduct a literature review, evaluate and organize information, and present information in an annotated bibliography, research paper, presentation, or other appropriate form of communication.

A Carolina Core integrative course in the major might, for example, introduce students to the research methods and practices in the discipline, including information resources and comparisons to other fields. It might also emphasize professional literature in the discipline and how it is organized, archived, shared, and disseminated. An integrative course might focus on a research project that requires students to use key information sources for the discipline.

Students who achieve this learning outcome will be able to:

1. Determine the nature and extent of information needed.
2. Identify sources of information applicable to the need.
3. Evaluate information and its sources for credibility, reliability, bias, and currency.
4. Employ appropriate conventions for integrating and citing sources ethically and legally.

5. Use, manage, and communicate information using appropriate technology to accomplish a specific purpose.
VI. Scientific Literacy

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<tr>
<td>Scientific Literacy</td>
<td>Upon completion of the Carolina Core, students will be able to apply the principles and language of the natural sciences and associated technologies to historical and contemporary issues.</td>
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**Context:** Some of the critical issues facing society concern sustainability, the environment, energy, biotechnology, health and medicine, food and water, security, and defense. Informed citizens must understand both the principles and manner of thinking associated with technology and the natural sciences, whether chemical, physical, computational, environmental, or biological, enabling them to consider challenges and potential solutions and to engage in public conversations about these issues fully and thoughtfully.

University of South Carolina students must acquire knowledge of the principles of the natural universe and be able to apply scientific methods (broadly defined to include research and inquiry, computational methods and/or empirical reasoning) in the quest to understand and engage in discussions and decision-making. Both acquisition of content and demonstration of skills are necessary. Students must be able to evaluate scientific information on the basis of its source and the methods and technologies used to generate it, to pose and evaluate arguments based on evidence, and to apply conclusions from such arguments appropriately.

**Foundational courses** that support this learning outcome require students to understand and apply timeless principles and laws of science. Students must understand and describe natural phenomena, and formulate questions and determine answers using methods of empirical reasoning. Application of principles and methods must be illustrated using historical or contemporary issues.

A Carolina Core integrative course in the major might, for example, require students to consider scientific issues alongside other issues underlying international, national, or local decisions, and express positions that are scientifically and technologically informed.

Students who achieve this learning outcome will be able to:

1. Demonstrate understanding and use of the basic principles, concepts, and terms of the specific scientific discipline.
2. Demonstrate and apply understanding of scientific method using observation, inquiry, formulation of hypotheses and experimentation to explain natural phenomena.
3. Evaluate the relationships between science, technology, and society as these affect critical historical or contemporary issues.
VII. Values, Ethics, and Social Responsibility

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<td>Values, Ethics, and Social Responsibility</td>
<td>Upon completion of the Carolina Core, students will be able to examine different kinds of social and personal values, analyzing the ways in which these are manifested in communities as well as individual lives.</td>
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**Context:** University of South Carolina students must demonstrate an understanding of the importance of values, ethics, and social responsibility in their own lives and in contemporary society. They must be aware of the source and function of values, both moral and personal. Students must reflect on the diversity of value traditions in contemporary societies and the ethical choices that these imply. As citizens of multiple communities, students must consider their various responsibilities, and the responsibilities of others, to embrace values, make ethical choices, and take action for the greater good.

**Foundational courses** that support this learning outcome enable students to identify sources of values and to evaluate ethical choices implied by values. **Foundational courses** require reflection as well as analysis of how different values manifest in one’s own life and in the community.

A Carolina Core **integrative course** in the major might include examination of values, ethics, and social responsibility in the specific context of the discipline area. **Integrative courses** might include service-learning, internships, or other field experiences that foster study, reflection, and social action.

Students who achieve this learning outcome will be able to:

1. Identify the source and function of values.
2. Demonstrate an understanding of the importance of values, ethics, and social responsibility for the self and for contemporary society.
3. Reflect on how values shape personal and community ethics and decision-making.