

Proposal for the Northeastern University Core

FINAL Version

4/1/15

Committee:

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Preamble:

In the Fall of 2013, the Senate Agenda Committee (SAC) discussed the need to examine the current core with the Provost's Office and convened an ad hoc committee (Susan Ambrose, Richard Daynard, Mary Jo Ondrechen and Uta Poiger) to write a white paper to serve as a basis for discussion, with an understanding that if the Faculty Senate was supportive of the concept paper, a committee with university-wide representation would be created to draft a proposal.

The Faculty Senate discussed the white paper in a Committee of the Whole on January 29, 2014. The discussion was positive and provided some critical feedback to drive the shaping of the new core. A committee was then formed by SAC, led by Professor Daynard and Dean Poiger, with members appointed by SAC on the recommendation of the Deans and including a representative from the Provost's Office and the head of Student Government Association.

The committee met frequently during the spring and summer of 2014. It shared a draft of a proposed new core in the fall of 2014, seeking feedback in person and via email from the following groups: Deans, Associate Deans, the University Undergraduate Curriculum Committee, Student Government, the Registrar's Office, and faculty colleagues. The committee hosted three public forums between November 2014 and January 2015. At the end of this process, the committee considered all feedback carefully and made substantive changes both to the categories and to the framework, resulting in this final document.

Introduction

Drawing on Northeastern's unique combination of academic excellence and experiential learning, the NU Core, in combination with majors and minors, is designed to develop in our students the broad knowledge, intellectual creativity, and multi-faceted skills that prepare them to be engaged global citizens and leaders, successful professionals, and lifelong learners. Students experience a broad liberal education through courses within and beyond their major fields. The intellectual strengths and balanced perspectives that students acquire enable them to engage with the world, translate and apply knowledge, solve problems, lead change, and enjoy rewarding and fulfilling lives.

The NU Core is organized around essential learning experiences, represented by the categories below, rather than traditional content areas or disciplines. It is designed to maintain flexibility for students while encouraging them to explore beyond their home disciplines. At the same time, students can expect the following elements to be threaded throughout several of their Core courses: communication skills, information literacy, civic engagement, exposure to Boston's rich cultural resources, and opportunities for global analysis and engagement. Students should also expect their Core courses to be highly interactive, offering opportunities for both knowing and doing.

The New NU Core Framework

1. This proposed core ensures a **breadth of learning** while providing **curricular flexibility**. Students complete the following requirements:
 - Requirements 1-8 are fulfilled through courses that allow students to meet specified learning goals. Students can use a single course to meet either one or two of these requirements. Therefore, students will complete this requirement with anywhere between 4 and 8 courses. Please note that these learning experiences can also count towards the majors.
 - Requirement 9 will be fulfilled with four writing courses:
 - First-year writing in the English Department
 - Advanced Writing in the Disciplines in the English Department (or approved equivalents)
 - two writing-intensive courses in the disciplines, which are embedded in the majors.
 - Requirement 10 may be fulfilled by a single experiential learning opportunity, including but not limited to co-op; a service-learning course; a research-intensive course; a Dialogue of Civilizations course (or courses).
 - A final requirement will be fulfilled by taking a capstone course in the major. Learning goals for these courses are designed by the major.

2. Any course that satisfies core requirements may also satisfy a requirement in a major.
3. There are **no level requirements** in the proposed core; departments and programs may propose core courses at any level of the curriculum.
4. Any department or program may propose courses for core requirements 1-8.
5. This is intended to be a universal core for all students, whether enrolled in Bachelor of Science or Bachelor of Arts programs.
6. The language requirement for the BA will remain the same: Complete elementary-level two (course number 1102) of a language with grades of C or better in all course work (pass/fail grades cannot be used to satisfy this proficiency requirement).
7. In order to ensure that students are exposed to Northeastern's core learning experiences, **three** of the core requirements 1-8 must be fulfilled through the completion of Northeastern University courses—i.e., not be Advanced Placement/International Baccalaureate, dual/concurrent enrollment, or transfer credit. However, AP/IB scores that currently qualify students for academic credit will continue to do so; students may continue to apply up to 32 AP/IB credit hours toward the completion of their degrees.
8. Students may petition the Provost's Office to fulfill a core requirement via Independent Study or an equivalent faculty-supervised experience.
9. Students who enter NU before 2016 will complete the existing core or may opt in to the new core; students who enroll during or after Fall 2016 will complete the new core.
10. The UUCC will propose an implementation and oversight plan to the Deans Council. We recommend that the UUCC establish a subcommittee that will approve courses that address the learning goals. We also recommend that the UUCC allow courses proposed for the new Core to count in the old Core as appropriate. Courses proposed for the core must provide students opportunities to achieve the learning goals for that requirement, though they need not use the exact language of the learning goals in the core.
11. We anticipate a Fall 2016 rollout. We are aiming for Faculty Senate approval in Spring 2015 and courses to be approved by December 2015. The new core will be included in the AY 2016-2017 Catalog.

Core Requirements

1) Engaging with the Natural and Designed World: Students study and practice scientific investigation and/or engineering design in order to understand the natural world and to effect changes in it to meet human and societal needs and wants. They learn critical thinking and analytical problem solving; the biological, chemical, and/or physical principles that govern the natural world; and the efforts that underlie the origins, development, acceptance, and applications of those principles.

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

1. Formulate a question that can be answered through investigation or a challenge that can be addressed through research or design.
2. Develop and use models based on evidence to predict and show relationships among variables between systems or components of systems in the natural and/or designed world.
3. Use and question scientific principles and practices to evaluate issues raised by the interplay of science, technology, and society.

2) Exploring Creative Expression and Innovation: Students study and practice creative expression and innovation. They learn about traditions of creative expression and innovation in any of a number of modes (texts, image, sounds, design, etc.) and products (poems, paintings, prototypes, business plans, games, apps, medical devices and procedures, etc.) and develop their own creative processes and products as a means of seeing and experiencing the world in new ways and communicating those experiences to others.

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

1. Describe creative processes in one or more disciplines (e.g. art, business, writing, science, engineering).
2. Generate an artifact (e.g., design, poem/essay, application, visualization, musical composition, product, prototype) through a creative process.
3. Evaluate experimentation, failure, and revision in the creation of innovative projects.

3) Interpreting Culture: Students study and analyze cultural practices, artifacts, and texts (e.g., visual art, literature, theatrical performances, musical compositions, architectural structures). They learn critical reading and observation strategies and how traditions of theoretical, aesthetic, and/or literary criticism provide different lenses for the interpretation of cultural objects and practices.

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

1. Recognize and identify a variety of cultural practices and creations, their forms of production, and development over time.
2. Acquire and assess techniques of interpretation (including critical reading and observation techniques), criticism, and analysis of cultural practices, texts, and/or artifacts.

3. Formulate arguments for and against different theories and interpretations of cultural practices, texts, and/or artifacts.

4) Conducting Formal and Quantitative Reasoning: Students study and practice systematic formal reasoning using either the symbolic languages of mathematics and logic or the combinations of text and symbols characteristic of computer software. They learn when and how to apply formal reasoning to particular problems and subject matters.

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

1. Recognize when examination of a phenomenon or situation can benefit from problem solving techniques and analyses that use formal reasoning.
2. Use their expertise in some applications of formal reasoning and know when to call upon domain experts when a problem is beyond their personal expertise.
3. Generate artifacts that require formal reasoning and planning. These artifacts might include logical proofs, mathematical computations, software, simulations, problem solutions, or plans/analyses in a variety of disciplines that require a formal, systematic component.

5) Understanding Societies and Institutions: Students study and practice social science, historical, and/or literary methods of inquiry and theories in order to understand human behavior and cultural, social, political, and economic institutions, systems, and processes. They learn theories of social behavior as they relate to phenomena such as globalization, social change, and civic sustainability.

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

1. Describe current theories of how social, political, or economic institutions, systems, and processes work.
2. Explain the historical and cultural contingency of many descriptions and explanations of human behavior, institutions, systems, and processes.
3. Evaluate social, political, or economic theories by applying them to local and global phenomena.

6) Analyzing and Using Data: Students study and practice methods and tools of data analysis and use. Students learn about the structure and analysis of at least one type of data (e.g., numbers, texts, documents, web data, images, videos, sounds, maps) and acquire the skills to examine, evaluate, and critique such data, extract patterns, summarize features, create visualizations, and provide insight not obvious from the raw data itself. Students also learn to be sensitive to ethical concerns associated with data: security, privacy, confidentiality, and fairness.

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

1. Describe how data may be acquired, stored, transmitted, and processed.
2. Analyze at least one important type of data and summarize the results of an analysis in ways that provide insight.
3. Use mathematical methods and/or computational tools to perform analysis.

4. Evaluate and critique choices made in selection, analysis, and presentation of data.

7) Engaging Difference and Diversity: Students study and practice methods for recognizing and understanding human diversity of various kinds in global, local and organizational contexts. They learn theories and perspectives of human difference, civic sustainability and multiculturalism, how social arrangements shape and are shaped by difference, and the histories, cultures and interactions of diverse groups.

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

1. Describe how notions of human difference have changed over time and across local and global contexts.
2. Discuss the value in recognizing, respecting and embracing human diversity, and how diversity contributes to culture and society, including civic sustainability.
3. Evaluate and compare two or more theories of human difference, and approaches to cultivating and leveraging diversity.
4. Connect theories of human difference and approaches to diversity to one's own experience.

8) Employing Ethical Reasoning: Students study and practice methods of analyzing and evaluating the moral dimensions of situations and conduct. They learn ethical theories and frameworks; explore how conceptions of morals and ethics shape interpretation of concepts such as justice, fairness, rights and responsibilities, virtue, and the good life; and apply these to personal, professional, social, political, historical or economic questions and situations.

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

1. Describe the moral and ethical elements of an issue, problem, or situation.
2. Explain at least two key ethical theories.
3. Apply ethical theories to moral dilemmas and personal positions.

9) Writing Across Audiences and Genres: Students study and practice writing for multiple public, academic, and professional audiences and contexts. They learn to use writing strategies, conventions, genres, technologies, and modalities (e.g., text, sounds, image, video) to communicate effectively.

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

1. Adapt writing for multiple academic, professional, and public occasions and audiences.
2. Develop facility with genres of their chosen academic field and profession.
3. Identify credible, relevant sources and engage meaningfully with them in their writing.
4. Demonstrate control of writing conventions, including citation standards and mechanics.

10) Integrating Knowledge and Skills Through Experience: Students study and practice the principles and strategies of experiential learning. Through direct experience and reflection on that experience, they learn to recognize and articulate their knowledge and skills, to apply the knowledge and skills they learn in one context to another context, and to determine what knowledge and skills they need to develop to meet their goals.

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

1. Apply knowledge and skills in new, authentic contexts.
2. Gain new knowledge and develop new skills to successfully engage in unfamiliar tasks and activities.
3. Integrate and use the deepened knowledge and skills as well as the newly gained knowledge and skills to continue to learn in their academic programs.
4. Articulate how and what one learns across a range of contexts.