

Updating the Core Committee Recommendations

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By design, the Updated Core integrates our majors' curricula by providing students with process skills and content themes that will augment their proficiency and maturity as students, problem solvers and self-learners. Through Core classes, students will hone foundational skills, including information literacy, writing and oral communication, thinking with ethics and values, quantitative skills, critical thinking, understanding of science, self-awareness, and personal responsibility. Content themes that will be addressed throughout the Core curriculum are equity and inclusion; local to global awareness; complexity, diversity and change; and transdisciplinary approaches to thinking. Core classes will give students opportunities to improve their capacity to communicate, to engage, listen, and participate constructively in conflict. The Core experience builds abilities and sensibilities that help students link the specialized knowledge they gain in their majors to the world and the people they will encounter upon graduation.

What is new in this Core:

- 1) an introduction to the Core in the freshman seminar that lays out a cohesive transdisciplinary framework that will be woven throughout the remainder of the Core;
- 2) a pair of new designations, "Thinking with Ethics and Values" and "Global Awareness and Societal Issues," that embody the Core themes;
- 3) a focus on equity and diversity throughout Core designations to underscore MSU's commitment to a global perspective;
- 4) a strengthened writing and communication component that adds a second required writing course as well as an upper division writing certification so that students gain experience writing in their discipline;
- 5) faculty development opportunities designed to increase coordination between courses in different designations so that students can see Core themes throughout the curriculum.

Core themes

- Local to global perspectives
- Transdisciplinary—crossing disciplinary boundaries to create a holistic approach to education
- Equity and inclusion
- Complexity, diversity and change

Foundational and personal skills

- Aesthetic literacy
- Critical thinking
- Ethical thinking/reasoning
- Information literacy
- Oral and written communication
- Personal responsibility
- Quantitative and empirical thinking
- Situational awareness
- Understanding of science

Course designations and learning outcomes

University Seminar (US)

Courses with the University Seminar (US) designation are intended for first-year students to engage with multidisciplinary readings and collegiate level discourse. The US is grounded in the cohesive learning experiences of the first year Core: it is designed to engage students in meaningful knowledge exchange with others, inspire students' intellectual convictions, and to pursue social and personal transformation. This transformation will include opportunities for students to develop a strong sense of self and self-awareness, explore their values and beliefs, gain a realistic expectation of their roles and responsibilities as productive group members, and foster a commitment to learning and excellence. The courses are designed to sharpen students' written and oral communication skills, information literacy, and interdisciplinary problem solving. The knowledge and skills gained in the US will prepare students to achieve their personal goals and chart intellectual and extracurricular paths. Further, these courses will provide students an opportunity to develop a sense of individuality and belonging within the context of the larger university community, through the exploration and discussion of meaningful texts, and/or through lectures and immersive experiences; with the objective of developing mutual understanding and respect for all, regardless of ethnicity, nationality, gender, socio-economic background, religion, or sexual orientation.

Learning outcomes:

- Apply critical thinking and information literacy to explore transdisciplinary ideas.
- Recognize and manage social complexity through group discussion.
- Communicate analytically, critically, and creatively in written and oral forms.
- Develop greater self-awareness and positive well-being as an effective member of the MSU community.

Thinking with Ethics and Values (EV)

Thinking with Ethics and Values (EV) courses introduce students to the ethics, values, faiths, politics, and other frameworks that define the capacities for decision-making and social exchange, as well as diversity, tolerance, and conflict. In a world characterized by increasingly complex social relations, global competition and new technologies, students learn to consider the broader implications of their decisions and choices, as well as how their decisions have the potential to better the human condition.

Learning outcomes:

- Identify the ethics and values behind the human capacity for decision-making.
- Apply active decision-making that requires justification according to ethical or value-based paradigms.
- Analyze decisions in a manner that takes into account the potential implications of their choices.
- Identify both differences and similarities between personal ethical frameworks and those held by other societies, cultures or nations.

Writing (WRIT)

Two writing courses (WRIT 101 and a 200-level WRIT course) must be taken in the first two years of study. These courses study the nature and practice of communication in writing across diverse disciplines. Students will develop new ways of understanding and accomplishing the act of writing itself. WRIT courses teach students how to learn writing in new rhetorical situations beyond the course by broadening their range of tools for and approaches to handling diverse writing tasks. WRIT courses are characterized by their focus on the act of writing as the course's main studied subject, by extensive writing and related rhetorical interaction, and by extensive feedback on and iterative revision of writing.

Learning outcomes:

- Understand writing and reading as a way to learn, self-reflect, build community and identity, and take action in one's professional, civic and domestic worlds.
- Collaborate with readers and other writers to iteratively create effective texts.
- Use a range of conventions of writing, habits of mind, means of persuasion, and characteristic genres of writing.

100-level (WRIT 101)

In the updated Core, WRIT 101 will be taken in the student's first semester. Its focus is transitioning from high school (or in some cases workplace) writing to college writing by making the nature of writing the studied subject of the course. This "writing about writing" approach works directly on students' conceptions of writing to help them understand how college writing processes and products will differ from writing they've done before. The theme of the course is *what writing is* and *how writing works*.

Learning outcomes:

- Use reflective writing to demonstrate metacognition on writing processes and products.
- Frame prior knowledge of writing in terms of research on writing encountered in the course.
- Demonstrate the ability to read and adapt to specific rhetorical situations.
- Demonstrate control of situation-appropriate conventions of writing.

200-level (WRIT 201 and 221)

Both WRIT 201 "College Writing II" and WRIT 221 "Technical Writing" will be redesigned to focus on writing *as inquiry* in various academic and professional settings. WRIT 201 will be offered in domain-specific versions: Writing in the Social Sciences, Writing in the Arts, Writing in the Natural Sciences, Writing in the Humanities, etc. The purpose of the 200-level writing requirement is specifically to bridge the general "nature of writing" knowledge from WRIT 101 and the discipline-specific writing students will practice at the upper-division. The 200-level course teaches students *how to conduct inquiry through writing* in various domains of knowledge, and *how to learn to write in new situations* they will encounter as they proceed through college and into their careers. Each major / department will choose whether to require that students take a specific version of WRIT 201, WRIT 221, or to leave the choice open to students. (WRIT 221 will probably be $\frac{1}{3}$ - $\frac{1}{2}$ of total

200-level sections offered.) Students will take the 200-level WRIT course no later than their fourth semester of study.

Learning outcomes:

- Demonstrate understanding of writing as the large-scale collaboration of writers and readers designing and using a range of genres to facilitate inquiry and manage projects.
- Demonstrate research abilities and information literacy.
- Synthesize existing textual resources to solve new problems
- Utilize key strategies for and techniques of readable and usable document design.
- Demonstrate metacognitive resources to facilitate learning to write in new writing situations.

Writing Upper-Division Certification

Each degree option will certify, through negotiation with the Core Writing subcommittee, coursework by which students will attain the equivalent of three credits of upper-division study of writing in the major.

Such coursework would usually be something students are already taking in their major. Courses certified for upper-division WRIT credit must include attention in class to kinds of writing and writing processes used in the field, iterative drafting to develop writing, and feedback on writing from the course instructor.

The requirement is meant to be extremely flexible. A degree option's credits could be accumulated in a series of classes (e.g. labs), in a single writing-intensive version of a course in the major, in a stand-alone writing class offered inside or outside the major department, or by other means negotiated by the department and the Core Writing subcommittee.

Learning outcomes:

- Demonstrate integration of declarative and procedural principles of writing learned in lower-division courses to disciplinary writing tasks.
- Produce successful inquiry-based writing oriented to disciplinary problems.
- Demonstrate familiarity with and competent application of common disciplinary genres and conventions of writing.
- Reflect on educational writing experiences and future writing situations.

Quantitative and Empirical Thinking (QE)

Quantitative & Empirical Thinking (QE) courses introduce students to concepts and theories of modeling and the process of making inferences from empirical data. The courses will give students an opportunity to appreciate how mathematical models, statistical models, computational thinking, or logic are used to make sense of the world around them and to critically evaluate claims made by others. These opportunities are situated in an understanding of the disciplines of mathematics or statistics as broad and interconnected, reflecting powerful methods of thinking and powerful

techniques for exploring the unknown and analyzing complex situations. These courses will address conceptual and theoretical foundations that will enable students to critically evaluate inferences based on the evaluation of data and models.

Learning outcomes:

- Interpret and draw inferences from mathematical or statistical models represented as formulas, algorithms, graphs, diagrams, or tables.
- Represent mathematical, statistical, or computational information numerically, symbolically, verbally, and visually.
- Form appropriate conclusions (inference) using statistical or mathematical models from data collected using observations or experiments, and critically evaluate claims made by others.

Aesthetics and Creative Literacy (AC)

Aesthetics and Creative Literacy (AC) courses teach students to understand complexity through interdisciplinary explorations and intercultural exchanges. Students investigate and evaluate ways in which personal, historical and cultural perspectives affect discovery and the creation of knowledge. Students will develop a sensory and aesthetic cognizance of themselves and the world, while honing visual, aural, and material literacies. AC courses use perception and critique to enhance the students' interpretive understanding and aesthetic responsiveness to forms of cultural expression.

Learning outcomes:

- Understand emotional, symbolic and cognitive influences in perceptions of the arts.
- Understand written, aural, visual, kinesthetic, or other forms by examining primary texts and/or works of art in one or more medium.
- Analyze how products of creative expression reflect, respond to, and shape social, religious, political, and/or intellectual contexts.

Contemporary Issues in Science and Engineering (CS)

Contemporary Issues in Science and Engineering (CS) courses focus on science, engineering and technology. The central goal of CS courses is to provide students with an overview of how knowledge is created in the sciences and to explore how science or engineering contribute solutions to some of today's complex problems. Through laboratory and/or inquiry-based experiences, students will explore what it means to think and communicate scientifically so they are better prepared to make informed decisions about scientific and technological issues in their lives.

Learning outcomes:

- Explain how science or engineering contribute to analyzing complex problems in the contemporary world.
- Describe the scientific or engineering method and habits of mind used by scientists or engineers.

- Apply methods used to explore scientific questions or to balance needs and constraints in engineering problems.

Natural Systems (NS)

Natural Systems (NS) courses address systems, including natural, physical, and earth sciences. NS courses explore topics that help us to understand nature – across historical time and from multiple vantage points – and the interdependency of the different branches of sciences. NS courses recognize that our scientific understanding of the world and our surroundings creates a web of knowledge. NS courses explore one or more branch of science, as well as how we create knowledge in these field(s). These courses encourage the exploration of different vantage points and discovery of how the sciences have changed historically. NS courses include either a lab or a lab-like experience.

Learning outcomes:

- Describe the kinds of questions asked in the discipline and the methods that practitioners use to explore those questions
- Understand how ideas and technologies to address scientific principles have developed and changed over time.
- Discern interrelationships of the sciences.

Global Awareness and Social Issues (GA)

In Global Awareness and Social Issues (GA) courses, students will begin to understand local, national, and global issues, and to identify an individual's role in addressing them. These issues might include social values, equity, justice, or human equality in either current or historical contexts. Students will begin to understand diverse perspectives on these issues that lead to conflict or consensus among individuals and their communities. These courses are designed to challenge and engage students with multifaceted social issues that prepare them to think and reflect in different and complex ways about their roles and responsibilities as informed citizens.

Learning outcomes:

- Identify social and structural relationships inherent in global issues, communities, economies, or organizations.
- Identify multiple perspectives on a social issue.
- Explain how an individual's perspective informs and limits understanding and knowledge.
- Define an individual's responsibility to society—locally, nationally, and globally.
- Integrate discipline-specific knowledge and structures to make informed decisions that reflect social, ethical, or aesthetic principles.

Research (RE)

Research (RE) courses offer students the chance to engage in knowledge creation. RE courses advance knowledge within the student's own field or across several different fields of learning, ending in the creation and dissemination of a scholarly product. The choice of topics should be student-generated, the process creative, and the end product meaningful to broader society. Students are required to apply information literacy competencies as they demonstrate the intellectual contribution of their research, analyze how their research relates to prior knowledge, and communicate the significance of that research to the appropriate community.

Learning outcomes:

- Design and complete an intellectual or creative activity that combines new knowledge with prior knowledge to create scholarship.
- Communicate the contribution of the scholarly product to the appropriate community.
- Analyze/evaluate the value of an information source based on its place in the evolving information ecosystem.
- Explain the ethical underpinnings of the creation and dissemination of information.

Role of Core Director

The committee strongly recommends that a Core Director be hired to implement then oversee the Updated Core. The Director will report to the Provost regarding the following:

- Coordinate with current Core committees to implement the Updated Core. The director will ensure that the implementation timeline is followed as closely as possible.
- Work with Core 2.0 committee chair to create any new committees required.
- Work with Updated Core committee to identify professional development workshops that are needed to help faculty implement the Updated Core and coordinate those workshops within the Center for Faculty Excellence. The Director will facilitate the workshops or identify another facilitator.
- Encourage faculty members to work across Core designations to create clusters of courses within the curriculum that could work synergistically, to illustrate how themes can be carried across disciplines. This will help the overall Core be presented as a coherent whole to faculty and students.
- Hold monthly meetings with the 2015-2016 Updating the Core committee.
- Work with an assessment consultant to create an assessment plan for the overall Core. This consultant will also be required to approve learning outcomes for all courses within the Core. If the Core Director is already an assessment specialist, the extra role listed here would not be required for implementation.

List of anticipated resources needed for implementation

Resources necessary to implement the updated Core fall in several categories.

1. Salary line for a full time Core Director.
2. Assessment specialist at 0.5 FTE.
3. To expand offerings of WRIT 221 Technical Writing requires a tenure-line faculty hire.

4. Most new resources needed for the Updated Core relate to faculty development, since most changes in the Core involve updating coursework and teaching practices. We recommend that most development (and funding related to it) be coordinated by the Center for Faculty Excellence, which should get a budget increase sufficient to run monthly workshops, host a number of faculty reading groups, and bring in 1-2 guest speakers per year. This will have an estimated cost of \$5000 per year.
5. Because the Core continues to be 30 hours, we expect that some of the newly required 200-level writing sections can be funded by savings from the reduced number of sections taught in other areas of the Core (e.g., as D is blended across the Core rather than being its own category). However, we are unlikely to see a perfect offset. NTT instructors are paid an average of \$4,100 / course, and we expect to add about 60 sections per year of WRIT 201 and 221 combined.

Timeline for implementation

1. August 2016: Appoint Core Director
2. Fall Semester 2016 : Updated Core reviewed by the CPC and Faculty Senate, followed by the Board of Regents
3. Spring Semester 2017: Begin implementation planning

Appendix A: Feedback from meetings and the committee's responses

The Updating the Core Committee held 6 meetings during April to hear feedback on our proposed Core. Those meetings included 4 open meetings, plus the Dean's Council, and the Planning Council. Below we include the summary of the feedback received and the committee's response.

Freshman Seminar

Several comments were received regarding teaching life skills versus academic skills in freshman seminar. Specifically students have been asking about financial literacy, suicide prevention, drug and alcohol awareness, and sexual assault prevention. This point also came up during the meeting with deans, with an understanding that maybe those topics do not need to be covered in freshman seminar, but the university should come up with a systematic way to make sure that all students are exposed to this training in person. The current focus on academic skills and assessment of critical thinking has received a great deal of interest from other universities who would like to incorporate similar assessment techniques. One thing that should be included in freshman seminar is working with students to explore why they are in college, what their major is actually like, and overall expectations of university life.

Committee response: We will pass on comments relative to life skills to Chris Kearns, Vice President for Student Success, and will remain focused on incorporating community building and self-awareness skills into the Core Curriculum.

Core Courses as a Tool for Recruiting Majors

This concern was enthusiastically expressed by faculty and department heads from Sociology, Psychology, Political Science and Economics. As written, the Global Awareness and Social Issues category, (a logical place where social sciences will be highlighted in the Core) encompasses learning outcomes which results in some of the courses which are currently taught as part of the Core, including intro courses to sociology, psychology, political science and economics, a poor fit without modifications to the courses. While most of those departments can see themselves teaching courses in the Global Awareness and Social Issues category, they don't necessarily see their intro courses fitting into that category. The efficiency of being able to use the intro course to fulfill a Core requirement, and for the department to recruit majors may be hindered in this new version of the Core.

Committee response: Courses in Global Awareness and Social Issues could easily recruit students into the respective majors. The double-dipping of a Core course and the intro course is a definite loss with the newly designed categories, so what needs to be addressed is the question of whether exposing students to the learning outcomes of the GA courses merit the change. The committee thinks that with the emphasis on higher order integration of disciplinary knowledge to solve current social issues, the course is an essential part of the new Core. And this course could be as or even more effective than the current intro courses for recruiting new students.

Diversity

The changes to shift the diversity awareness across multiple courses instead of channeling it into a single course is a welcome improvement. Without the diversity category, it is not clear where modern languages fit into the Core. Study abroad and immersion experiences should be given Core credit. If a foreign language requirement for all students goes into the Core, we should be mindful of the fact that some of our students with disabilities will have serious difficulties learning a foreign language and a sign language option should be included. The new approach to infusing diversity across the Core is great; keep that aspect. With the loss of the Diversity category, there is no obvious home for foreign language in the new Core. The core represents the university's values, and therefore it is unacceptable to not include a foreign language in the Core.

Committee response: The committee is in full agreement that foreign languages provide students a perspective on alternative views of the world, and fully in support of our students taking a foreign language. Courses currently taught in the modern languages curriculum could easily be included in the Global Awareness and Societal Issues category, but those courses would like be 300-level courses where students are reading in a language other than English. We met with Galen Brokaw and Ada Giusti, who summarized the concerns that learning a language should be part of the Core, since the Core curriculum expresses the university's values. MLL is not necessarily interested in having a language requirement for all students, so that leaves us with the problem of figuring out where learning a foreign language fits into our current categories. We discussed allowing students who take a year of a foreign language to be excused from one other category, but were concerned that it devalues languages by setting them up as an alternative to Thinking with Ethics and Values or to Natural Science, rather than promoting the importance of knowing other languages for communicating globally. We would like to participate in discussions about how to encourage students to learn one or more foreign languages, and use readings and discussions in freshman seminar to underscore the importance of learning other languages.

Writing

The 200-level writing should be available fall semester for those freshmen who are exempted from Writ 101. The second semester of writing is welcomed by the vast majority of faculty, and seen as an improvement to the Core. For writing in the majors, graduate students should not be asked to edit/grade all the writing. It could significantly slow their progress. The space and resources needed for implementation are non-trivial. If we are adding several dozen new sections of a 200 level writing course, where and when will those courses be taught?

QE

For Quantitative and Empirical Thinking courses, learning outcomes related to visual representations of data in multiple formats should be included.

Thinking with Ethics and Values

I am very excited to see that ethics is added as a possible Core course. In mechanical engineering curriculum we always struggled to have enough credit hours to add a separate course on ethics. On the other hand a course on ethics is important for our curriculum and is part of our accreditation requirement. I hope a required course on ethics will be part of the new Core Curriculum. This will be a tremendous help for our curriculum.

Faculty Development and Faculty Buy In

We will need faculty education to increase faculty buy in. An ad campaign aimed at faculty, advisors and students will be necessary to create excitement for and understanding of the updated Core. Core language should be on all syllabi. Maybe include 30 minutes about it during orientation to increase student buy in.

Appendix B: Writing Core implementation timeline

Writing Core: Two-year Phased Implementation Timeline / Critical Path

With Fall 2016 administration commitment to funding additional sections (~60 per year) of 200-level writing courses (to be taught by 7 new NTT faculty) and to one TT hire to develop faculty and curriculum for WRIT 221 Technical Communication (no existing research-faculty expertise) in order to facilitate new volume of 221 offerings, the expanded Writing Core can be implemented in the following timeframe:

- Fall 2016:
 - Pilot first two WRIT 201 themed courses (Writing in the Social Sciences, Writing in the Natural Sciences).
 - Form Writing Core Committee.
 - Search TT technical communication line.
 - Begin cross-campus faculty development to help faculty understand upper-division certification requirement and ways of meeting it.
- Spring/Summer 2017
 - Assist departments in developing upper-div certification proposals.
 - Begin reviewing upper-div certification proposals.
 - Hire necessary NTT faculty to meet additional section demand.
 - Develop three additional WRIT 201 theme courses (Writing in the Arts, Writing in the Humanities, Writing in Engineering) to be piloted the following academic year.
- Fall 2017
 - Shift most WRIT 101 instruction to fall semester / most WRIT 2xx instruction to spring.
 - TT tech-comm hire develops new technical writing course for Core and begins NTT faculty development to teach it (first sections can be offered Spring 2018).
 - Pilot new 201 themed courses developed preceding spring/summer.
 - Continue faculty development to guide upper-div certification proposals.
 - Continue reviewing and negotiating upper-div certification proposals. Goal to have these all completed no later than Spring 2018.
 - Offer monthly faculty development sessions on teaching for upper-div certifications (assignment designs, responding to writing, assessment, using Writing Center resources, using class time).
- Spring/Summer 2018
 - Shift most WRIT 2xx instruction to spring semester.
 - Develop any additional 201 themed courses (e.g., Writing in Business, Writing in the Health Sciences).
 - Complete review and negotiation of upper-division certification proposals.
 - Continued monthly faculty development sessions on upper-div writing instruction.