MEMORANDUM

To: Provost and Executive Vice President Charles Zukoski
    Vice Presidents
    Vice Provosts
    Deans
    Department Chairs
    Chair, Faculty Senate
    Chair, Professional Staff Senate
    The Reporter
    The Spectrum

From: Satish K. Tripathi
      President

RE: General Education Program

Dear Colleagues:

After careful review and with the recommendation of our Provost and our Faculty Senate, it is my pleasure to approve and promulgate the new undergraduate General Education Program. Enclosed is the new General Education Program as amended and approved by the Faculty Senate at its December 2, 2014 meeting.

The design of this new General Education Program, which represents a vital component of our undergraduate students’ academic experience at UB, reflects the collaborative efforts and insights of more than 140 faculty, staff, and students working together across the university community over several years. My sincere thanks to the Steering Committee chaired by Dean of Undergraduate Education Andrew Stott, and to all who will continue to be engaged in the development and implementation of this revised program.

Please share this memo with faculty and staff in your area as appropriate.

Enclosure
To: Ezra Zubrow, PhD, Chair, UB Faculty Senate

From: Peter Horvath, PhD, Associate Professor, Exercise and Nutrition Sciences

DATE: October 29th, 2014

RE: Resolution to Implement a new Undergraduate General Education Program – Approved as amended December 2, 2014

Please consider the following resolution to implement a new program of Undergraduate General Education at the University at Buffalo to better serve all undergraduates across all units.

Whereas:

1. General Education is an essential component of an undergraduate student’s academic program and experience at UB, mandated by SUNY,

2. and the UB General Education program has not been revised for nearly 20 years, resulting in a curriculum that no longer adheres to its founding principles,

3. and the current General Education program does not encompass integrated learning, and has been eroded by expansive waivers, exemptions, and inconsistent requirements,

4. and for over 5 years the university has been engaged in an effort to design a new program of General Education involving over 140 faculty, staff, and students who have strived to provide the elements and framework capable of delivering a significant improvement in the provision of General Education,

5. and the proposal has been approved by the undergraduate Associate Deans Council, and endorsed by multiple UB groups including (but not limited to), the Foreign Language Instruction Coordinating Council, the Council on International Studies and Programs, the Department of History, School of Management Undergraduate Committee, Academic Advising Leadership, and the University at Buffalo Student Association.

Therefore be it resolved that:

1. The Faculty Senate approves the new General Education program as described in the “Final Recommendations” submitted to the Faculty Senate on October 3, 2014, and available at the following website: www.buffalo.edu/gened

2. The Dean of Undergraduate Education, in collaboration with the Faculty Senate, will name a faculty advisory committee, and appropriate working committees that will be charged with overseeing the implementation of the new program. The faculty advisory committee will delineate a process for review of new courses as required, define appropriate policies, and develop an assessment plan. The Dean of Undergraduate Education will ensure other responsibilities are appropriately assigned as needed to successfully implement this new program, and will report regularly to the appropriate committees of the Faculty Senate.
General Education – A New University at Buffalo Curriculum

As amended and approved by the University at Buffalo Faculty Senate
December 2, 2014

1. Introduction

On December 2nd, 2014, the Faculty Senate approved the following General Education requirements for all students at UB, starting with the incoming freshman/transfer class of 2016. The program is comprised of 40 credits of study for all students, irrespective of major, with no exemptions or waivers.

<table>
<thead>
<tr>
<th>Component</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year or Transfer Seminar</td>
<td>3 or 1</td>
</tr>
<tr>
<td>Communication Literacy 1</td>
<td>4</td>
</tr>
<tr>
<td>Communication Literacy 2</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics and Quantitative Reasoning</td>
<td>4</td>
</tr>
<tr>
<td>Scientific Literacy and Inquiry</td>
<td>7</td>
</tr>
<tr>
<td>Thematic Integrative Cluster</td>
<td>9</td>
</tr>
<tr>
<td>Global Integrative Cluster (choose one of 3 tracks)</td>
<td>9</td>
</tr>
<tr>
<td>Global/Diversity track</td>
<td></td>
</tr>
<tr>
<td>OR Foreign Language track</td>
<td></td>
</tr>
<tr>
<td>OR International Experience track</td>
<td></td>
</tr>
<tr>
<td>Integrative Capstone</td>
<td>1</td>
</tr>
</tbody>
</table>

Domestic Diversity Requirement

Students are required to take at least one 3 credit course focusing on domestic diversity. An approved course can be taken anywhere in the program and may also satisfy other aspects of the program (e.g. First Year Seminar or Cluster course). Courses that meet this requirement will be designated as such in the undergraduate catalog and coded in HUB.
2. New Course Components

First Year Seminar

Description
The First Year Seminar would act as an introduction to General Education and the philosophy of integrative learning. It would be primarily taught by ladder faculty as part of a regular teaching load, and ideally capped at 24 students. These would be branded as ‘big ideas’ courses, tackling conceptual problems from a professor’s disciplinary perspective, while also sharing common learning outcomes across sections that focus on fundamental SUNY and Middle States expectations for critical thinking, ethical reasoning, and oral communication.

The exact nature of the first year seminar would be determined by those departments that offered them. Content would arise from the disciplines, and credit would be counted towards the major (where applicable). Those programs with a developed first year experience that meets the course intentions and learning outcomes with alternative methods of delivery would be considered to have fulfilled this requirement, subject to approval by the Office of General Education. As a further recognition of the scale of this proposal, it may be appropriate to pilot First Year Seminars before adopting them campus-wide.

Aims and Objectives
The First Year Seminar aims to:
- Recruit students by providing a small class experience in the context of a large research university.
- Provide departments with an opportunity to make an early connection with students and a route into the discipline.
- Improve retention and graduation and time-to-completion rates by sparking student enthusiasm for college-level learning.
- Provide first-rate, high-impact educational practices to UB’s racially, ethnically, socio-economically diverse undergraduate student body.
- Encourage faculty mentoring of students.
- Inculcate rigorous and sustained academic work and study habits among students.
- Serve as a student’s first experience with the eportfolio.

Minimum Learning Outcomes
Having completed a First Year Seminar, students will be able to:
- Apply critical thinking by exploring modes of inquiry and asking ‘big questions.’
- Analyze disciplinary content to identify contexts, learn fresh perspectives, and debate and discuss problems in the field.
- Understand and apply the methods of close reading, note-taking, analysis and synthesis.
- Recognize and debate ethical issues and academic integrity in a variety of settings
- Demonstrate proficiency in oral discourse and written communication.
- Develop essential research and study skills such as time management.
- Use their eportfolio.
Transfer Seminar
Description
Transfer Seminars, built on the model of the First Year Seminar, should be offered at the appropriate level for transfers entering UB. Like the First Year Seminar, it would be primarily taught by ladder faculty as part of a regular teaching load and ideally capped at 24 students. These would be branded as ‘big ideas’ courses, tackling conceptual problems from a professor’s disciplinary perspective. Students entering with a threshold of less than 45 credits would take a 3-credit course; students entering with 45 credits or more would take a 1-credit course. These more advanced students, eligible to be admitted directly into a major, might take a seminar that was focused on their majors and taught in the program.

All international Transfer students will complete a 3-credit Transfer Seminar, regardless of their credit threshold, so that the transition to another campus and a large American research institution will be more successful.

Aims and Objectives
The Transfer Seminar aims to:

- Introduce transfer students to the University at Buffalo and to higher learning at a research university.
- Orient transfer students to the UB General Education program.
- Orient transfer students to the UB General Education Clusters.
- Orient transfer students to the necessity for writing/communication in university and professional settings.
- Promote ethics and academic integrity.
- Introduce transfer students to the eportfolio.

Minimum Learning Outcomes
Having completed a Transfer Seminar, students will be able to:

- Having completed the Transfer Seminar, students will be able to:
- Describe the unique character of higher learning in a university, such as deep domain knowledge, the role of research, and value of experiential learning.
- Articulate the components of the UB General Education program and the integration of multiple disciplines.
- Select and develop a thematic framework.
- Develop an academic plan for coursework for General Education Integrative Clusters.
- Express the necessity for, and broad applicability of, communication literacy.
- Comprehend ethical requirements within higher education and a wider context.
- Utilize written and oral communication to demonstrate the outcomes in the eportfolio.
Communication Literacy 1

Description
The proposed Communication Literacy sequence recognizes that our students will communicate in a world that is textual, but also digitally mediated and highly visual. It recognizes that students will be asked to collaborate and communicate with diverse groups in a global context, and that they will be challenged not only to find information, but also to organize, evaluate and manage the enormous quantity of information they find.

Aims and Objectives
All Communication Literacy courses shall have the following components:

- A minimum of 5000 words of revised, formal writing assignments.
- A minimum of three formal writing assignments.
- Regular, weekly informal writing assignments (e.g. online discussion forum posts, journals, blogs, in-class writing, etc.)
- Formal writing assignments will comprise a minimum of 50% of the final grade.
- At least one assignment with a research component. In addition, the first course in the sequence will require:
  - At least one assignment with a visual/digital component.
  - At least one oral presentation.
  - A final portfolio of substantively revised work from the course.

Minimum Learning Outcomes
Having completed the Communication Literacy course, students will be able to:

- Evaluate, construct and support arguments.
- Analyze the effects of different audiences, purposes, and genres on communication practices across media (rhetorical analysis).
- Locate, evaluate, synthesize and manage information (text, visuals, media) effectively and ethically.
- Analyze how information is created, disseminated and used in a constantly evolving information environment.
- Compose in a variety of academic, professional and civic contexts.
- Apply a productive writing process, including revising their work to discover and reconsider ideas and improve their writing.
- Compose and deliver effective oral presentations.
- Understand, evaluate, and compose effective visual communications.
- Understand and use current digital composing methods.
- Vary genre conventions for structure, paragraphing, tone and mechanics appropriately.
- Analyze cultural and human differences when communicating.
Communication Literacy 2

Description

Students will have a range of choices for completing the second course. Some schools or departments may elect to require their students to take a particular course as part of their major or interdisciplinary fields. As these courses are developed in the coming academic years, it is expected that the general outcomes listed below will be modified to be more specific and that some additional outcomes may be added.

While this course is named “Communication Literacy 2” for the purposes of General Education, departments should rename this course to reflect that it is taught within the disciplines.

Minimum Learning Outcomes

Having completed Communication Literacy II, students will be able to:

- Compose in academic, professional, and/or workplace genres related to a field of study.
- Apply writing processes common to that field.
- Compose and deliver a professional presentation.
- Understand and apply visual and digital composing methods as appropriate to the field.
- Describe the conventions of genres within a field.
- Make effective disciplinary and professional arguments.
Mathematics and Quantitative Reasoning

Description
The Mathematics and Quantitative Reasoning requirement provides a basis for students to develop skills in mathematical and quantitative thinking that are necessary to function in modern society. This requirement assumes three full years of college preparatory mathematics, including problem solving skills, as the basis for exploring data and its use in the media, business and daily life. Example topics might include the challenges of "Big Data" and data science, the mathematics of voting, cryptography, or issues drawn from current affairs, targeting questions such as: financing bank loans, credit card debt and personal finance; risk in environmental or health issues; and claims in advertisements.

This course is required to every student unless able to demonstrate that they meet its Minimum Learning Outcomes elsewhere in their curriculum, subject to approval by the Office of Undergraduate Education.

Aims and Objectives:
Math and Quantitative Reasoning aims to:
• Develop the mathematical and quantitative reasoning skills required by students to navigate their college years and prepare them to be twenty-first century citizens.

Minimum Learning Outcomes
Having completed the Math and Quantitative Reasoning course, students will be able to:
• Analyze data and apply empirical or theoretical methods to guide decision-making.
• Interpret mathematical models such as formulas, graphs, and tables, and draw inferences from them.
• Choose appropriate models for a given problem, using information from observed or deduced data.
• Employ quantitative methods, mathematical modeling and/or statistics to develop well-reasoned arguments to identify and solve real world problems beyond the level of basic algebra, while also learning to recognize the limitations of mathematics and statistics.
• Recognize common mistakes in empirical and deductive reasoning and quantitative problem solving.
• Choose appropriate models for a given problem, using information from observed data and/or knowledge of the system being studied.
Scientific Literacy and Inquiry

Description
This 7 credit, interdisciplinary sequence, ideally aimed at sophomore students, intends to promote scientific literacy by actively exploring how scientific discoveries are made, how they are subject to forms of manipulation, and how they have impacted society both in the short and longer terms. It will highlight the breadth of scientific disciplines and range of scientific methodologies through:

- The incorporation of a historical and cultural context for the development of scientific understanding.
- The addition of an ethical dimension to scientific research and dissemination.
- Exposure to debates and controversies with science.
- Interdepartmental collaboration that introduces students to the vast variety of scientific endeavor at UB.

The Scientific Literacy and Inquiry course will be comprised of 6 credit hours of lecture and 1 credit hour of lab/recitation. The optimal course design would be a team-taught course that provided material covering scientific domains from the Nano level to the global level and beyond, taught by three different departments. The lab/recitation serves as an integrative experience culminating in a final project.

Aims and Objectives
Scientific Literacy and Inquiry aims to:

- Develop an understanding of the principles that underscore scientific discoveries with an appreciation of the differences and commonalities across the various disciplines, and the extent to which the advancement of science and technology are interwoven.
- Foster inquiry into, and appreciation of, the evolving nature of science and the vital role it plays in everyday life.
- Develop the ability to critically evaluate current scientific controversies (real and contrived)
- Develop the ability to distinguish between scientific and pseudo-scientific method, considering issues of fairness, inclusion, marketing and dissemination of scientific information.
- Understand seminal discoveries and the history and evolution of scientific knowledge as it is impacted by social, political and historical contexts, and the challenge this presents to dogma and ethics (both internal to scientific research and to society as a whole).
- Recognize that (a) science is a continuous process, evolving through innovative and refined experimentation and (b) controversies in science occur when there are differences in the interpretation of data based on limited experiments.

Minimum Learning Outcomes
Having completed Scientific Inquiry and Literacy, students will be able to:

- Analyze how the understanding of scientific phenomena has changed through time.
- Examine the role science plays in everyday life.
- Identify key ethical issues in scientific research.
- Distinguish scientific information from pseudo-scientific information.
- Evaluate the role of pseudo-science on public opinion.
- Organize and describe the path of a scientific discovery (or a set of discoveries) through history.
- Assess the effect of society (or historical pressures) on discovery.
- Demonstrate that science is continuous, rather than discrete.
- Question specific interpretations of data.
- Debate current scientific controversies.
- Debate the findings/interpretations from discussed experiments.
- Identify the different factors that may contribute to scientific discoveries

This course is required of every student unless able to demonstrate that they meet its Minimum Learning Outcomes elsewhere in their curriculum, subject to approval by the Office of General Education.
Domestic Diversity

Description
The University at Buffalo as the flagship public institution in New York State must prepare its graduates with the cultural competencies necessary to live, work and recreate with domestically diverse groups that characterize New York State and increasingly the U.S. as a whole. We currently live in a nation where the largest states either already are, or will soon become “Majority minority” states, and by 2050 projections are that the country as a whole will be majority minority. Cultural competence with regard to domestic diversity (including race, class, gender, indigenous people, sexual orientation, disability) is a core competency that every UB student should be able to demonstrate. Therefore among the courses students complete, there shall be at least one course in domestic diversity, designed to ensure that UB graduates are able to demonstrate some measure of “cultural competency” within the diverse communities of the U.S. and particularly New York State. Students may select from courses of 3 or more credits, so designated that have been approved by a committee of faculty, and noted as such in the course catalog.

Courses on the approved list may also meet general education requirements and or major requirements; still others may only meet the university diversity requirement.

Minimum Learning Outcomes
Having completed the University Diversity Requirement, students will be able to:

• Discuss what it means to be American in a pluralistic society;
• Critically examine prejudices and ignorance about diverse people and difference
• Describe the challenges inherent in a diverse society;
• Demonstrate understanding of and articulate the values and strengths of diversity
• Demonstrate skills to communicate and relate to peoples and cultures in America
3. Integrative Clusters

The new General Education program contains two “Integrative Clusters” described in detail below. These clusters are the “Thematic Integrative Cluster” that connects courses by theme; and the “Global Integrative Cluster” that seeks to inculcate multiple cultural literacies, and may be completed one of three ways –

1. Global/Diversity track, requiring three classes (9 credits) each with a global and/or diversity focus;
2. Language track, requiring a minimum 9 credits of study in a second language;
3. International Experience track, in which study abroad experiences are combined (where necessary) with study from the preceding two tracks for a total of 9 credits.

Typically two thirds of the coursework required of the Integrative Clusters will meet at least four of the following SUNY General Education requirements if the courses are at least three credits:

- Arts
- Humanities
- US History
- Western Civilization
- Other World Civilization
- Social Sciences
- Foreign Language

The new General Education program presents an opportunity to reconsider which courses fall into which category (for example, creative writing or media study counting towards Arts.) In some instances courses may fulfill more than one category (as is currently the case – PHI101: “Intro to Philosophy” is registered with SUNY as fulfilling both the Humanities and Social Sciences categories). Students enrolled in the course may only count it towards fulfillment of one category, however.

The remaining coursework required of the Integrative Clusters may come from any discipline, irrespective of the SUNY GER.

What is “Integrative Learning?”

Integrative learning is defined by the American Association of Colleges and Universities (AAC&U) as “an understanding and a disposition that a student builds across the curriculum and co-curriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus.”

The integrative clusters provide a means of structuring General Education in such a way as to encourage students to reflect upon their education as a continuum rather than a set of discrete courses, and by this means deepen their understanding of academic material through multiple iterations of concepts across coursework, disciplines, and modes of experience. Integrative learning has been shown to improve critical thinking, as well as help students to gain a greater appreciation of complexity and nuance as they encounter the tensions and complementarities that exist between disciplines. When utilized in General Education, integrative learning serves as useful complement to the specialized knowledge acquired in the major.

In its purest form, integrative learning encourages the formation of “learning communities” – courses that have been developed as a linked sequence to provide students with a learning pathway. From the AAC&U: “The key goals for learning communities, are to encourage integration of learning across courses and to involve students with ‘big questions’ that matter beyond the classroom. Students take two or more linked courses as a group and work closely with one another and with their professors. Many learning communities explore a common topic and/or common readings through the lenses of different disciplines. Some deliberately link ‘liberal arts’ and ‘professional courses’; others feature service learning.” Learning Communities are considered a “High Impact” practice that result in improved retention and academic engagement, along with other benefits.

What integrative learning is not: Integrative learning it is not an initiative intended to replace disciplinary rigor with superficial interdisciplinarity. Individual courses are taught in the disciplines and subject to the academic standards of those fields. Integrative learning adds a further dimension to student learning by requiring students to contextualize their studies and keep looping back to them rather than compartmentalize them and move on.
The Cluster Concept

The integrative cluster concept offers students an innovative means for rounding out their general education by asking them to engage with the breadth of disciplinary study that UB considers fundamental to an education in the liberal arts. Specifically, the clusters provide students opportunities to think within and across disciplinary categories not otherwise served by the proposed General Education program: arts, civilization and history, humanities, social sciences, and world languages and cultures.

The cluster concept will begin by identifying broad disciplinary areas to serve as the building blocks of a liberal arts education. These “UB Areas” (in lieu of a better term) correspond to the knowledge areas of the SUNY General Education Requirements (GER):

<table>
<thead>
<tr>
<th>UB AREAS</th>
<th>SUNY GER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts (ARTS)</td>
<td>ARTS</td>
</tr>
<tr>
<td>Civilization and History (CIV/HIST)</td>
<td>AMER HIST, WEST CIV, OTHER WORLD CIV</td>
</tr>
<tr>
<td>Humanities (HUM)</td>
<td>HUM</td>
</tr>
<tr>
<td>Social Sciences (SOC SCI)</td>
<td>SOC SCI</td>
</tr>
<tr>
<td>Languages and Cultures (LANG &amp; HUM)</td>
<td>FOREIGN LANG and HUM</td>
</tr>
</tbody>
</table>

Students will be required to complete a minimum of FOUR UB Areas as they complete their integrative clusters. The remaining cluster courses may come from anywhere in the university including courses that correspond to UB areas they have already fulfilled so long as the courses contribute to the theme of the cluster. A great deal of flexibility and creativity exists in this distribution of UB Areas and related SUNY GER across the clusters. No one area or category is forcibly locked into either cluster.

How the Clusters Work

The UB Areas will serve as a guidepost for composing clusters. Students will make choices from a preapproved list of individual courses or from preset cluster combinations with the understanding that between the two clusters at least four of the UB Areas (and SUNY GER) will be satisfied.

Academic Advisors and online tools will play crucial roles when guiding students with respect to cluster composition and course selection. Academic advisors will be available to help students understand how to make choices that fulfill all requirements in an interdisciplinary and integrative manner, including those students who prefer to assemble their own clusters or if they would like to include courses not on the pre-approved lists.

The HUB academic advisement report will track satisfaction of the Clusters, UB areas and the SUNY GER when courses become assigned to the clusters. Students will be able to see which required areas they have satisfied, which ones they need to satisfy, and where they can insert courses that come from any area of their choosing.

Practically speaking, each cluster will have two course “bins” that list all of the UB areas. Each bin will show when a particular UB area has been satisfied. Whenever a third bin is present in a cluster, it will not be linked to any area or category and will be the free space where students can add any related and approved cluster course. The Global/Diversity cluster will show all three tracks but will indicate in which track students are completing courses.

Courses approved for the University Domestic Diversity requirement may also be used in the clusters and potentially meet one of the UB areas or SUNY GER.
How Integration Works

The clusters will do the work of integration in two ways.

First, in consultation with the UGE/Faculty committee, individual courses will be designated as being part of an integrative cluster, with the expectation that the instructor signal this fact on his or her syllabus, teaches content that alludes to the broader cluster theme, and utilizes the eportfolio (to the extent practicable) when assigning coursework. Beyond these minimal requirements, course content will be at the discretion of the instructor in collaboration with his or her department chair, departmental curriculum committee, etc. In time, some students may wish to independently devise thematic clusters with the approval of the General Education Office.

Second, each student will be provided with an eportfolio account at orientation and be introduced to it through the First Year Seminar and Communication Literacy 1 courses. Students will be expected to submit and file their assignments on the eportfolio throughout the course of the Gen Ed program. These “learning artifacts” will form the basis from which the final capstone assignment will be drawn.

Learning Communities: ideally, colleagues would collaborate across departments to form learning communities – perhaps in collaboration with Scholarly Communities such as University Honors College or Undergraduate Academies. While the Office of Undergraduate Education will support the formation of learning communities, there are challenges to delivering such labor-intensive sequences consistently and at scale. As such, they will not be the default expectation for integrative learning at UB.
EXAMPLE A
Potential Language for the Undergraduate Catalog:
Integrative Clusters

Like all aspects of the General Education program, the Thematic Integrative Cluster and Global Integrative Cluster provide you with opportunities to work in a variety of disciplines to broaden your exposure to knowledge and enrich your education. For the integrative clusters, you’ll be asked to work within, and integrate knowledge from, the arts, civilization and history, the humanities, the social sciences, and world languages and cultures. The clusters offer innovative and flexible ways to bring together these “UB Areas” as you choose the courses that fulfill your requirements.

To compose the clusters, you’ll select courses that relate to the particular theme or focus of the cluster and that come from at least four of these UB Areas. Your final course in each cluster may come from any discipline. Courses may also be selected from among the approved list of university domestic diversity coursework.

Academic advisors are prepared to help you with questions about cluster completion and any other related matters.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Bin 1 (UB areas)</th>
<th>Bin 2 (UB areas)</th>
<th>Bin 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thematic Cluster</strong></td>
<td>ARTS</td>
<td>ARTS</td>
<td>Any UB course</td>
</tr>
<tr>
<td>(minimum nine credits)</td>
<td>CIV/HIST</td>
<td>CIV/HIST</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HUM</td>
<td>HUM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOC SCI</td>
<td>SOC SCI</td>
<td></td>
</tr>
<tr>
<td><strong>Global Cluster: Global/Diversity Track</strong></td>
<td>ARTS</td>
<td>ARTS</td>
<td>Any UB course</td>
</tr>
<tr>
<td>(minimum nine credits)</td>
<td>CIV/HIST</td>
<td>CIV/HIST</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HUM</td>
<td>HUM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOC SCI</td>
<td>SOC SCI</td>
<td></td>
</tr>
<tr>
<td><strong>Global Cluster: Language and Culture Track</strong></td>
<td>LANG</td>
<td>HUM</td>
<td>Any UB course</td>
</tr>
<tr>
<td>(minimum nine credits)</td>
<td></td>
<td></td>
<td>(Bin 3 required only if coursework in Bins 1 and 2 does not satisfy the cluster credit requirement)</td>
</tr>
<tr>
<td><strong>Global Cluster: International Experience Track</strong></td>
<td>ARTS</td>
<td>ARTS</td>
<td>Any UB course</td>
</tr>
<tr>
<td>(minimum nine credits)</td>
<td>CIV/HIST</td>
<td>CIV/HIST</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HUM</td>
<td>HUM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LANG</td>
<td>LANG</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOC SCI</td>
<td>SOC SCI</td>
<td></td>
</tr>
</tbody>
</table>
EXAMPLE B
What the Automated Interface Might Look Like for the Student

When a student makes a course selection in the first “bin” within each cluster, the UB Areas available in subsequent “bins” will be reduced by one.
For example, as the student below chooses SOC SCI and then ARTS for her Thematic Integrative Cluster, she sees her choices narrow as she moves through the Global/Diversity track of the Global Integrative Cluster.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Bin 1 (UB areas)</th>
<th>Bin 2 (UB areas)</th>
<th>Bin 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic Cluster</td>
<td>ARTS CIV/HIST</td>
<td>✓ ARTS CIV/HIST</td>
<td>✓ Any Course</td>
</tr>
<tr>
<td>(minimum nine credits)</td>
<td>HUM ✓ SOC SCI</td>
<td>HUM</td>
<td></td>
</tr>
<tr>
<td>Global Cluster:</td>
<td>✓ CIV/HIST</td>
<td>✓ HUM</td>
<td>✓ Any Course</td>
</tr>
<tr>
<td>Global/Diversity Track</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(minimum nine credits)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EXAMPLE C
Completed Theme Cluster and Global/Diversity Cluster: Language and Culture Track

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Bin 1 (UB areas)</th>
<th>Bin 2 (UB areas)</th>
<th>Bin 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic Cluster</td>
<td>ARTS CIV/HIST</td>
<td>✓ ARTS CIV/HIST</td>
<td>✓ CIV/HIST</td>
</tr>
<tr>
<td>(minimum nine credits)</td>
<td>HUM ✓ SOC SCI</td>
<td>HUM</td>
<td></td>
</tr>
<tr>
<td>Global Cluster:</td>
<td>✓ LANG</td>
<td>✓ HUM</td>
<td>No course required</td>
</tr>
<tr>
<td>Language and Culture Track</td>
<td>(five-credit course)</td>
<td>(five-credit course)</td>
<td></td>
</tr>
<tr>
<td>(minimum nine credits)</td>
<td></td>
<td></td>
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</tr>
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