A. Global Readiness

An exemplary university must be international. There is a global contest for talent, ideas, and influence going on, and over 95% of the world’s six and a half billion people do not live in the United States. Because many of North Carolina’s biggest opportunities, challenges, and problems today are international rather than state-specific, regional, or even national in nature, we must internationalize our entire campus community and infuse everyone with more sophisticated international/intercultural perspectives. Failure to do so will not only imperil the university and the citizens of the state, but leave our students without the tools and abilities to succeed in the generations ahead.

In recent years we have enhanced the global competitiveness of our students, our university, and our state by rendering our curriculum more rigorous, more scientifically oriented, and more international.

1. 21st Century Skills

The curriculum at UNC-Chapel Hill provides students the skills and perspectives necessary to survive and thrive in an ever widening world. The General Education requirements cultivate the forms of knowledge highlighted in the UNC Tomorrow report in the following ways:

1. Oral and written communication. All first-year students must successfully complete a two-course sequence of Composition and Rhetoric courses (ENGL 101 and 102). Goals include mastering the technical aspects of writing and speaking, incorporating appropriate source material properly cited, learning to read and listen analytically, and to shape arguments according to purpose and audience. Students in ENGL 102 also participate in sustained collaborative projects.

2. Critical thinking and analytical reasoning. The General Education curriculum adopted in 2006 was specifically designed to introduce students to the different analytical perspectives, and different forms of reasoning, that are rooted in disciplinarity. Thus, our distribution requirements are meant to awaken in students an appreciation of “the most widely employed approaches to knowledge”—scientific, historical, literary, and so on. Courses that meet the “Approaches” criteria must seek to instill in students the kinds of critical thinking and analysis characteristic of the discipline.

3. Problem solving, creativity and innovation. At UNC-Chapel Hill, all Approaches courses are problem-oriented, and they require students to confront and think about subjects, issues, and problems that lie on the frontiers of twenty-first century scholarship. One of the Approaches requirements, on Visual and Performing Arts, is dedicated specifically to the creative process in the arts, and the Experiential Education requirement challenges students to apply their knowledge and critical skills to “real world” situations involving problem-solving in the most practical sense. In order to be successful in the 21st century world, students gain literacy in a variety of ways to obtain, process, and formulate new knowledge, often via electronic means. The excellent library resources at UNC-Chapel Hill no longer rely on print-based information.

4. Teamwork and collaboration. The composition and rhetoric courses required of all students incorporate group work and collaboration in systematic fashion. Moreover, all other general education courses involve regular discussion in small classes of roughly twenty students, many of which lead to collaboration within smaller groups.

5. Science and math. Students at UNC-Chapel Hill take a minimum of two courses in science, at least one of which has a required laboratory component, as well as two or more courses involving
quantitative reasoning. The new General Education curriculum also makes it harder for majors in the humanities and fine arts to avoid taking math and science courses in their junior and senior years. Both the Distributive and Integrative options for fulfilling General Education requirements at the junior-senior level require that students choose courses from Divisions of the College outside that of their own primary major. In most cases this will ensure that students take an additional math or science course beyond the “foundational” level considered essential for all citizens of the twenty-first century. Although our math requirements do not address financial literacy explicitly, they ensure a high level of quantitative competency applicable in many contexts.

6. **Global awareness.** At UNC-Chapel Hill all students take at least one course that focuses on the transnational and transregional forces that have shaped and continue to shape the global experience. Courses treating “Global Issues” might analyze globalization in general or focus on particular case studies. Beyond this single requirement, the curriculum cultivates global awareness by encouraging study abroad and foreign language training, and by providing several thematic “clusters” of courses that are oriented toward global issues (e. g., clusters on “Global Environmental Change” and “Border Crossings.”)

7. **Work ethic and professionalism.** In place for over 100 years, the Code of Student Conduct contains both an Honor Code and a Campus Code. The judicial system is run by students and successfully instills these values in students. Revised on a regular basis, a recent Honor Carolina initiative brought a new generation into personal contact with these principles. The need for collaboration in the form of team work has meant changes to these codes of conduct as well. Other elements include the successful Carolina Entrepreneurial Initiative which fostered the creation of an annual competition that promotes sustainable business enterprises and a thriving minor, demonstrate the high level of competence Carolina’s students have in these areas.

8. **Environmental literacy.** Curricular and co-curricular examples abound, from the Student Environmental Coalition, the annual Sustainability Day, flourishing majors in Environmental Studies and Environmental Sciences, student support for physical surroundings and “green” buildings such as Ramshead Center, the administrative offices of the N.C. Botanical Gardens, and the projected home for the Robertson Scholars Program, and the reverence with which the entire campus community treats the Coker Arboretum, etc. all demonstrate an awareness of and respect for the natural world.

UNC-Chapel Hill’s revised General Education curriculum, and the many initiatives advanced since the adoption of the University’s 2003 Academic Plan (which called for the further internationalization of the University’s programs), have greatly increased the “global readiness” of the entire University community. The FedEx Global Education Center enhances students’ global awareness in myriad ways—by hosting speakers and conferences, by facilitating study abroad, by providing venues for student discussion—and departments, Schools, and Centers across the University have made global engagement central to their educational programs and research missions.[see appendix] UNC-Chapel Hill is in the top two among public institutions in rate of participation in study abroad programs; not coincidentally, International Studies has become one of the fastest growing undergraduate major in the College of Arts and Sciences.

**New Directions and Opportunities**

UNC-Chapel Hill is proud of the strides made in recent years to increase global knowledge and awareness among its students in the area of twenty-first century skills. In several important respects, however, the University risks falling short of its objectives. To prepare students to tackle the problems of this century, we need to address the following priorities:

1. **Promote the study of foreign language and its use in degree programs.** The faculty committees that revised the General Education curriculum in 2003-4 incorporated a new foreign
language requirement (in essence, one additional semester of required language training) that the College of Arts and Sciences has been unable to implement for lack of adequate resources, including available classroom space and qualified instructors. Because competence in at least one foreign language must be considered a precondition for successful global engagement, the University remains committed to this important new feature of the 2006 “Making Connections” curriculum. In addition, offering a rich set of languages from all periods of history and all parts of the world - Asian, African, Classical, Romance, Germanic, Slavic and East European - is critical for a major research university where bright and eager students seek opportunities to study Chinese, Japanese, Korean, Lingala, Arabic, Hindi, and Urdu, as well as Spanish and other modern European languages. The rapid expansion of majors in International Studies – where extensive study of foreign language is required - has stretched the resources of the Curriculum in International Studies and the University thin. That Curriculum recently established a new “Global Health and the Environment” track for undergraduate majors and is in the planning stage for a master’s level degree program that will also include a track in global health.

Therefore, a plan needs to be developed to fully implement the Foreign Language Intensive requirement, to provide additional variety and numbers of foreign language classes, and to provide on-going support, via courses and administration, to the Curriculum in International Studies. Responsibility: Provost, Dean of the College of Arts and Sciences, Office of Undergraduate Education

2. **Fully develop the Interdisciplinary Cluster Program.** Virtually all of the “general skills” objectives outlined in Section I of the UNC Tomorrow report—critical thinking, problem-solving, teamwork and collaboration, creativity, analytical reasoning, and innovation—inform the rationale behind the interdisciplinary “Cluster Programs” that are a hallmark of the new general education curriculum. Successful Clusters encourage students to see knowledge as an all-purpose toolkit for solving problems that transcend disciplinary boundaries; they cultivate the open-mindedness and analytical adaptability we believe are vital to future success in the global arena. Unfortunately, the labor-intensive nature of these teaching initiatives means that limited faculty resources make it difficult to create, staff, and integrate the courses that comprise the thematically-defined Cluster Programs. Academic units are stretched thin as they strive to meet their various curricular obligations (First Year Seminars, Honors courses, major courses, etc.) In order for the Cluster Programs to perform the vital integrative function for which they were designed, many new faculty lines need to be created so that departments will have flexibility in setting teaching schedules and freeing faculty time for the kind of innovative teaching that will both enrich and transform students’ minds. Responsibility: Dean of the College of Arts and Sciences, Office of Undergraduate Education

2. **Global Competitiveness**

In recent years UNC-Chapel Hill has made much progress toward increasing its international stature. According to the Associate Provost for International Affairs, “What many people in the campus are trying to do is make the University a better international player. We’re not doing a service to either our students or the state if we proceed as if internationalization or globalization is not taking place.” We have enhanced the global competitiveness of our students, our university, and our state by rendering our curriculum more rigorous, more scientifically oriented, and more international. Building on this premise, UNC-Chapel Hill will continue to create a systematic international strategy under the aegis of pan-university administrators who are charged with developing and executing the same plan. Strategic international partnerships with the National University of Singapore, King’s College London, and in many locations in Africa add value to UNC-Chapel Hill and at the same time allow us to use scarce resources more efficiently. New tools, including searchable, electronic databases such as ones identifying
Faculty International Expertise and International Linkages, the recently launched international portal for the entire University (global.unc.edu), additional faculty positions in international fields and facilities (such as the FedEx Global Education Center) devoted to international programs and initiatives are among the most visible accomplishments. UNC-Chapel Hill already has a robust and accomplished global health portfolio that aligns with UNC’s mission of research, teaching, and service. These strengths can be used to leverage new resources and attract top faculty and students. In addition, UNC-Chapel Hill has considerable strengths in the area of technology transfer.

In a world where nations and economies are increasingly interdependent – whether through the continuing globalization of business and trade, ongoing demographic changes, or the rapidly rising costs of health care and personnel shortages in many countries – ill health in any population affects people everywhere. UNC already has a remarkable set of global health activities. Faculty, students, and trainees at virtually all levels participate in complementary education and training opportunities with “on the ground” research projects in over 50 countries. Core strategic strengths of UNC investigators include infectious diseases such as HIV/AIDS, tuberculosis, and malaria; nutrition, reproductive and child health; water, sanitation, and environmental health. This work has generated international recognition, substantial extramural federal support, and important discoveries.

**Important examples include:**

**Research**
- Awarded more NIH Roadmap grants than any other research university; awarded over $600 million in NIH research grants awarded to UNC investigators;
- The largest social science award in the history of UNC-Chapel Hill history was given to the Carolina Population Center - $70 million USAID-funded for MEASURE Evaluation;
- Established “Innovation Laboratories” to accelerate the pace of discovery in key areas of global health research thanks to a recent $50 million gift from the family for whom UNC’s Gillings School of Global Public Health is to be named;
- Created the UNC-Chapel Hill-Gates Foundation project on trypanosomiasis and other neglected diseases.

**Teaching**
- Certificate in Global Health offered through the School of Public Health provides an academic and structured extracurricular concentration in global health for all interested graduate students at UNC;
- Pan-university courses in global health, *Interdisciplinary Perspectives in Global Health*; APPLES service learning seminar, *Connections: International Service-Learning and Local Applications*, that purposefully links students’ international experiences to concerns faced by immigrants and refugees, locally, in North Carolina;
- African Studies Seminar for Health Professionals, designed to improve the effectiveness and sensitivity of international, collaborative health-related research and/or practice in Africa for health professionals throughout the Triangle;
- *Development in Practice*, a new course under development, will provide structure for and help contextualize student involvement as advocates and volunteers in various sustainable development activities;
- *Critical Issues in Global Health*, a series of online courses in global health, will be offered online in fall 2008; the long-term goal is to have a full online Global Health Certificate program.

**Service**
- Carolina students and faculty have established a variety of humanitarian and service organizations dedicated to global health as part of their mission, for example: Honduran Health Alliance (Honduras), World Camp for Kids (Malawi, Honduras, India), Students for Students International (Zimbabwe, Tanzania), Millennium Villages Project, and a very active Student Global Health Committee;
Carolina for Kibera (Kenya) was named a “Hero of Global Health” by the Gates Foundation and was recently featured on the cover of Time for Kids magazine.

Entrepreneurial Public Service Fellowships offer undergraduate and graduate students the opportunity to transform an innovative idea into a sustainable enterprise that addresses a critical community need, globally and/or locally;

To date three surgeons (from ENT, Obstetrics, and Plastic Surgery worked in Malawi at the UNC-Chapel Hill project, delivering health care services, teaching, and developing sustainable programs;

The UNC Malawi Dental Project provides a cultural exchange between UNC students and Malawians, delivers dental health education, and provides emergency, preventive, and restorative care to those in need in the Lilongwe Hospital.

New Directions and Opportunities

The key objective of the recently established, pan-university UNC Institute for Global Health & Infectious Diseases (IGHID) is to unify and bolster global health activities in research, teaching, and service across campus. The IGHID is formed at a time of intensive academic and research competition in the global health arena and a race for recognition among the top universities in the country. In light of these developments, our challenge is to identify and act on existing strengths and think strategically about new opportunities that further UNC’s mission in teaching, research, and service; foster collaborative, interdisciplinary activity; and focus on impact at both the global and local levels.

UNC-Chapel Hill is proud of the strides made in recent years to increase global competitiveness and create the infrastructures necessary for doing so. The University, however, has additional objectives.

- **Create a Strategic Plan.** Supplementing recent efforts to enhance the internationalization of the University, a more comprehensive plan is needed to fully internationalize/globalize the University with campus-wide structures and goals that serve institutional aims more effectively than efforts, however worthy, by individuals. This plan must include means to educate the citizens of the state more fully about the dimensions of globalization and about the associated with the process.
  
  Responsibility: Associate Provost for International Affairs.

- **Create a Global Campus.** Facilitate and structure UNC student and faculty involvement with international collaborators for training, internships, and service; Bring international scholars to UNC; Establish scholarships for international students at the undergraduate and graduate level across the university. It is also necessary to expand faculty committed to global issues, including global health. The projected Global Research Institute (GRI) on the 4th floor of the FedEx building will bring external fellows to work with faculty members on important international issues, problems on a rotating basis. Student demand for global health currently outruns the supply of faculty to train, advise and mentor them. Provost, Associate Provost for International Affairs, Deans

- **Establish the Triangle as the center of the universe for global health.** The Triangle area arguably has the largest critical mass of global health expertise in the world and therefore has the potential for creating strategic international partnerships. A coordinated effort can capitalize on the strengths of individual institutions and organizations. Expanded opportunities in research and service will require seed grants, infrastructure on campus and with international partners, and expansion of domestic partnerships with triangle NGOs including IntraHealth, RTI International, Family Health International, and Duke University. Responsibility: UNC Institute for Global Health & Infectious Diseases (IGHID)
Technology transfer. In addition to a strong foundation in Global Health, UNC-Chapel Hill has strength in the area of “tech transfer” and would be pleased to make available its locally developed Research Tool Set for system-wide use.

Personnel in the Office of Technology Development have extensive networks and collaborations with counterparts in institutions throughout the world. Carolina technology transfer personnel interact and partner closely with such entities as the World Intellectual Property Association; Academies of Sciences in numerous countries; government agencies throughout Europe and Asia; economic development and venture capital interests in key market areas through the world; agencies, foundations and institutions serving developing and least developed countries; contract research houses in India and China; universities literally in every region and market/sub-market of the world; and numerous related networks. These networks and collaborations provide a solid foundation for research and technology transfer collaborations, joint technology licensing opportunities, business partnering, and other benefits. Further, these networks provide windows to world markets and partnerships for Carolina, its faculty and its RTP collaborators; and into Carolina and RTP for the network of partner organizations and collaborators around the world – and for prospective students, staff and faculty who may be attracted to Carolina to study and to work.

Research Tool Set. Carolina’s Office of the Vice Chancellor for Research and Economic Development has developed a “dashboard” of research operations and management software for the various offices that comprise an academic research operation – including sponsored research, industry partnerships, technology transfer, human subjects compliance, conflict of interest management, and others. The tool set is in the process of being installed on the sixteen campuses of the UNC system, which will provide a valuable tool to enhance efficiencies and management of the research enterprise at each institution. Perhaps most importantly, by standardizing this suite of management tools on each campus, and by overlaying a research and innovation capacity “profiling” tool across each of the campuses, it is envisioned that the UNC system will be well positioned to quickly and accurately profile its research expertise and innovation potential, thus enhancing each campus, the system, and the state of North Carolina as a “preferred partner” for business, industry, academic, economic development, and other such interests literally around the world.
The University of North Carolina at Chapel Hill strives to cultivate the skills, knowledge, values, and habits that will allow graduates to lead personally enriching and socially responsible lives as effective citizens of rapidly changing, richly diverse, and increasingly interconnected local, national, and worldwide communities. The undergraduate experience aims to foster in Carolina graduates the curiosity, initiative, integrity, and adaptability requisite for success in the complex environment of the twenty-first century.

To these ends our curriculum seeks to provide for all students: (1) the fundamental skills that will facilitate future learning; (2) broad experience with the methods and results of the most widely employed approaches to knowledge; (3) a sense of how one might integrate these approaches to knowledge in a way that can cross traditional disciplinary and spatial boundaries; and (4) a thorough grounding in one particular subject. The undergraduate major is dedicated to the fourth of these curricular goals; the General Education curriculum, organized around the theme of “Making Connections,” addresses the other three goals simultaneously.

The General Education requirements that apply to all UNC undergraduates can be outlined as follows:

- **Foundations**: the skills needed to communicate effectively both in English and another language; to apply quantitative reasoning skills in context; and to develop habits that will lead to a healthy life.
- **Approaches**: a broad experience with the methods and results of the most widely employed approaches to knowledge.
- **Connections**: a sense of how to integrate foundational skills and disciplinary perspectives in ways that encourage linkages between discrete areas of knowledge, on the one hand, and differing geographic, social, conceptual, and practical contexts (local, national, global, academic, professional), on the other hand.

In addition, students pursuing the bachelor of arts degree need to satisfy **Supplemental General Education** requirement.