



# The Aggie Report

A BIWEEKLY NEWSLETTER FOR FACULTY AND STAFF OF NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY

## Reaching the Core

Just as the core of an apple provides seeds for producing future generations of the fruit, North Carolina A&T State University's new general education core curriculum – now called University Studies – will provide a foundation for continuing academic development and lifelong learning among students and graduates.

Like many colleges and universities across the nation, N.C. A&T is in the midst of reviewing and revamping its general education curriculum. Even the curriculum review committee at Harvard University acknowledges it's time for a change within its own hallowed halls after more than two decades of maintaining the status quo.

The good news is that the general education curriculum review and revision process that began at

A&T in spring semester 2002 is near completion. Fourteen pilot courses are being offered this semester with plans to introduce 30 courses in the spring and 60 courses next summer. By fall 2005, University Studies will be comprised of over 100 courses, and faculty and the classes of 2007 and 2008 will be fully immersed in the new curriculum.

"We are near the end, but there is a great deal of work to do before University Studies is introduced in whole next fall," says Robert Davis, sociology professor and one of two co-chairs of the general education core curriculum review executive committee. "Engagement and input from faculty and staff are still necessary parts of the process."

By that Davis means the review committee needs more courses developed

that have interdisciplinary themes as well as ways to assess courses, instruction and achievement.

A town hall meeting will be held in November for further input from faculty and staff. To continue the process of engagement, each academic dean will appoint one member and the faculty from each college/school will elect one member to a faculty roundtable to oversee course selection, development and assessment within their respective disciplines.

The University Studies Core Curriculum Review Committee has recommended to the provost that a dean of university studies be hired. An advisory board comprised of all university stakeholders would be available to the dean.

"Like parking issues and *Futures*, the University Studies program will impact everyone on campus, and everyone should get involved in the process," said Sanjiv Sarin, associate dean of engineering and the other co-chair of the core curriculum review executive committee. "All of the schools and colleges must offer core curriculum courses and all students must fulfill course requirements to graduate."

Sarin particularly noted that University Studies is a lot more than what will go in the course catalog.

"What's in the curriculum (content) is not nearly as important as how it is delivered in

the classroom," he said. "Every student comes with a different experience, and an objective of the new curriculum is to actively engage students in the learning process.

"Interdisciplinary learning sensitizes students to the world's problems. Any one discipline is not enough."

The University Studies Core Curriculum Review Committee meets the first and third Wednesday of each month at 10 a.m. in the Bluford Library Dean's Conference Room. For the dates and meeting minutes, visit the University Studies website, [www.ncat.edu/~univstud/oversight](http://www.ncat.edu/~univstud/oversight). ■



## University Studies Core Curriculum Review

### Executive Committee

**Robert Davis**, co-chair

Professor, Sociology

**Sanjiv Sarin**, co-chair

Associate Dean, College of Engineering

**Scott Simkins**

Associate Professor, Economics

**Lea Williams**

Interim Associate Vice Chancellor, Academic Affairs/Institutional Planning, Assessment and Research

### Full Committee

**Shirley Bell** (English)

**Shea Burns** (Mathematics)

**Robert Davis** (Sociology)

**Nita Dewberry** (Foreign Languages)

**Doretha Foushee** (Biology)

**Cynthia Gillispie-Johnson** (Technology)

**Sandra Hicks** (Nursing)

**Perry Howard** (Agriculture and Environmental Sciences)

**Abede Kebede** (Physics)

**John Kelly** (Engineering)

**Trent Larson** (Human Performance and Leisure Studies)

**Michael Roberto** (History)

**Sanjiv Sarin** (Engineering)

**Scott Simkins** (Economics)

**Jean Williams** (Library Services)



Bell



Burns



Davis



Dewberry



Foushee



Gillispie-Johnson



Hicks



Howard



Kebede



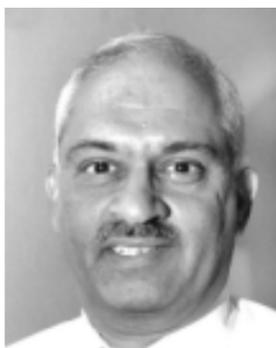
Kelly



Larson



Roberto



Sarin



Simkins



J. Williams



L. Williams

## University Studies: The Gateway to Interdisciplinary Instruction and Lifelong Learning

What began nearly two years ago as a comprehensive review and revision of the general education core curriculum at North Carolina A&T State University is nearing fruition.

Today, under the heading “University Studies,” the core curriculum is being shaped into an interdisciplinary themed program that ties into the university’s *Futures* mission, vision and goals.

### Purpose

The general education (University Studies) core curriculum at N.C. A&T provides a framework for critical inquiry that serves as a foundation for continuing academic development and life-long learning. Through discovery, inquiry, analysis and application, the core curriculum promotes broad based critical thinking skills, effective written and oral communication of ideas, appreciation for diverse cultures, and commitment to ongoing civic engagement and social responsibility.

The core curriculum draws its purpose from the university’s goal to prepare students through interdisciplinary learning and discovery to assume leadership roles in a fast changing global society. Through coursework and co-curricular experiences, the general education core curriculum develops in students an understanding of the interdisciplinary nature of knowledge, encourages cross-disciplinary dialogue and promotes the development of intentional learners who take responsibility for their learning.

### Guiding Principles

The general education core curriculum serves as a bridge to advanced study within disciplinary majors, where the critical thinking skills developed during a student’s first two years of coursework are further developed and enhanced. The core curriculum extends into the major with an emphasis on the continued development of effective critical thinking and communication skills, culminating in a senior-level capstone experience that highlights and reflects students’ intellectual development within and across disciplines.

While the core curriculum promotes foundation-level knowledge in a broad array of disciplines, it is important to note that it does not provide all of the preparation needed for every major. Some majors will require additional coursework, field experiences and collaborative learning skills to meet discipline specific needs.

The general education core curriculum provides a common foundation for building the knowledge and skills that are required in today’s fast-changing society. Every graduate – regardless of major – will possess a common set of attributes defined by the core curriculum’s learning objectives.

Students will be expected to demonstrate achievement of these learning objectives and associated learning outcomes through ongoing assessment at both the course and program level. In addition, academic departments offering courses that fulfill general education core curriculum requirements will be required to regularly provide evidence that the courses are achieving the learning objectives that they were originally developed to achieve.

### Developmental Model

The developmental model is based on a progressive development of knowledge and skills in four major goals over four years: (1) critical thinking, (2) communication skills, (3) social responsibility/civic engagement/ethics and (4) diversity/world cultures.

The current learning objectives are connected to these four goals.

For each goal, there are three levels of learning:

- Foundation/Discovery
- Analysis/Problem Solving
- Integrative

For each goal-level combination, a set of measurable outcomes will be defined. As students progress from the foundation/discovery level to the integrative level, the learning outcomes will change from knowledge and comprehension to synthesis and evaluation (higher levels in Bloom’s taxonomy). ■

## Learning Objectives for the University Studies Program

*Throughout the general education core curriculum, students should continually demonstrate abilities in the areas outlined below.*

Knowledge Areas	Learning Objectives
Communication	<ul style="list-style-type: none"> <li>• Effectively use information technology to find, interpret, evaluate and use information discerningly</li> <li>• Effectively communicate in diverse settings and groups using written, oral and visual means</li> <li>• Effectively employ critical thinking skills in written and oral communication</li> <li>• Effectively relate ideas and concepts, as well as modes of inquiry, across disciplines</li> </ul>
Analytical Reasoning	<ul style="list-style-type: none"> <li>• Use analytical thinking skills to critically evaluate information</li> <li>• Apply multiple modes of inquiry, including quantitative and qualitative analysis, to formulate, describe, evaluate and solve problems</li> </ul>
Application of Scientific Method	<ul style="list-style-type: none"> <li>• Apply scientific reasoning skills to model natural, physical, social and aesthetic phenomena using multiple modes of inquiry</li> <li>• Use a wide range of disparate information and knowledge to draw references, test hypotheses and make decisions</li> </ul>
Multicultural Relations within a Global Society	<ul style="list-style-type: none"> <li>• Understand African/African American culture and traditions, including political, economic and social challenges affecting people of African descent</li> <li>• Interact effectively with people from diverse cultures</li> <li>• Understand and appreciate the diversity and interrelationship of cultures locally, regionally, nationally and internationally</li> </ul>
Historical and Social Processes in a Changing World	<ul style="list-style-type: none"> <li>• Understand the role of social, political and economic institutions and processes in the development of societies and the factors that lead to dynamic change in societies over time</li> </ul>
Artistic and Literary Understanding	<ul style="list-style-type: none"> <li>• Understand the role of literature, music and the fine arts in describing, defining and celebrating the human condition in diverse world cultures</li> </ul>
Ethics and Social Responsibility	<ul style="list-style-type: none"> <li>• Understand and apply ethical reasoning principles to resolve moral, social and professional issues</li> <li>• Understand the role that markets, governments and other social institutions can play in reducing social and economic inequality</li> </ul>
Health, Lifestyles and Behavior	<ul style="list-style-type: none"> <li>• Understand and promote principles of wellness that include nutrition, exercise, avoidance of mind-altering chemicals, development of healthy relationships and personal growth</li> <li>• Recognize behaviors that place individuals, families and communities at risk</li> </ul>

## Futures: The Vision

**North Carolina Agricultural and Technical State University is a learner-centered community that develops and preserves intellectual capital through interdisciplinary learning, discovery, engagement, and operational excellence.**

“Based on information that I received at the Association of American Colleges and Universities Institute on General Education (Newport, R.I., May 2004), N.C. A&T State University is ahead of many American colleges and universities as far as implementing general education reform. In my opinion, this is because on our campus overlapping efforts have intensified positive results, in that the overall mission of general education reform dovetails with A&T’s *Futures* mission of providing students with opportunities for ‘visionary and distinctive interdisciplinary learning, discovery and engagement.’”



Shirley H. Bell, Associate Professor and Interim Chair  
Dept. of English

# Sample Clusters

The interdisciplinary courses within the University Studies curriculum will be organized in thematic clusters. Collectively, the courses within a cluster ensure coverage of all University Studies learning objectives.

The following are examples of possible core clusters. These clusters are provided for illustrative purposes only, as no decisions have been made to date regarding actual cluster topics.

## Leadership and Entrepreneurship

### UNST 1XX, Persuasive Writing

- Effectively communicate in diverse settings and groups using written means.
- Effectively employ critical thinking skills in written communication.
- Effectively relate ideas and concepts, as well as modes of inquiry, across disciplines.

### UNST 1XX, Analytical Models for Decision Making

- Effectively employ critical thinking skills in written and oral communication.
- Use analytical thinking skills to critically evaluate information.
- Apply multiple modes of inquiry, including quantitative and qualitative analysis, to formulate, describe, evaluate and solve problems.

### UNST 1XX, Scientific Innovations for Market Leadership

- Effectively communicate in diverse settings and groups using visual means.
- Effectively use information technology to find, interpret, evaluate and use information discerningly.
- Apply scientific reasoning skills to model natural, physical, social and aesthetic phenomena using multiple modes of inquiry.
- Use a wide range of disparate information and knowledge to draw inferences, test hypotheses and make decisions.

### UNST 1XX, History of African American Entrepreneurs and Innovators

- Effectively communicate in diverse settings and groups using oral and visual means.

- Effectively employ critical thinking skills in oral communication.
- Understand African/African American culture and traditions, including political, economic and social challenges affecting people of African descent.
- Interact effectively with people from diverse cultures.

### UNST 2XX, Policy Speeches of the Great World Leaders and Generals

- Effectively communicate in diverse settings and groups using written and oral means.
- Effectively relate ideas and concepts, as well as modes of inquiry, across disciplines.

### UNST 2XX, Effective Leadership in Government and Civic Engagement

- Understand the role of social, political and economic institutions and processes in the development of societies and the factors that lead to dynamic change in societies over time.
- Understand and appreciate the diversity and interrelationship of cultures locally, regionally, nationally and internationally.

### UNST 2XX, Role of Literature and Fine Arts in Promoting Social Justice

- Understand the role of literature, music and the fine arts in describing, defining and celebrating the human condition in diverse world cultures.

### UNST 2XX, Business and Leadership Ethics

- Understand and apply ethical reasoning principles to resolve moral, social and professional issues.
- Understand the role that markets, governments and other social institutions can play in reducing social and economic inequality.

## Energy and Environment Cluster

### UNST 1XX, Journalism for Science and Technology

- Effectively communicate in diverse settings and groups using written means.
- Effectively employ critical thinking skills in written communication.

- Effectively relate ideas and concepts, as well as modes of inquiry, across disciplines.

### UNST 1XX, Mathematical and Computer Models of Weather Phenomena

- Effectively employ critical thinking skills in written and oral communication.
- Use analytical thinking skills to critically evaluate information.
- Apply multiple modes of inquiry, including quantitative and qualitative analysis, to formulate, describe, evaluate and solve problems.

### UNST 1XX, Soil and Water Pollution

- Effectively communicate in diverse settings and groups using visual means.
- Effectively use information technology to find, interpret, evaluate and use information discerningly.
- Apply scientific reasoning skills to model natural, physical, social and aesthetic phenomena using multiple modes of inquiry.
- Use a wide range of disparate information and knowledge to draw inferences, test hypotheses and make decisions.

### UNST 1XX, Role of African American Scientists in Environmental Mitigation

- Effectively communicate in diverse settings and groups using oral and visual means.
- Effectively employ critical thinking skills in oral communication.
- Understand African/African American culture and traditions, including political, economic and social challenges affecting people of African descent.
- Interact effectively with people from diverse cultures.

### UNST 2XX, Policy Debates on Energy and Environmental Issues

- Effectively communicate in diverse settings and groups using written and oral means.
- Effectively relate ideas and concepts, as well as modes of inquiry, across disciplines.

### UNST 2XX, Political and Economic Models of Energy Production and Consumption

- Understand the role of social, political and economic institutions and processes in the development of societies and the factors that lead to dynamic change in societies over time.
- Understand and appreciate the diversity and interrelationship of cultures locally, regionally, nationally and internationally.

### UNST 2XX, Influence of Popular Film and Music on Environmental Policy

- Understand the role of literature, music and the fine arts in describing, defining and celebrating the human condition in diverse world cultures.

### UNST 2XX, Ethical Issues in Energy Use

- Understand and apply ethical reasoning principles to resolve moral, social and professional issues.
- Understand the role that markets, governments and other social institutions can play in reducing social and economic inequality.

## Other Possible Clusters

- Science, Economics, Policy and Politics of Environmental Pollution
- Randomness, Genetics, World Financial Markets
- Mathematics, Economics and Politics of Global Population Migration
- World War, Science and Economic Development in the United States
- Science, Social Relations and Criminal Justice
- Ethics, Economics and Politics of Nuclear Weapons
- Geology, Water Resources and History of Human Migration
- Hunger, Climate and Social Change
- Wisdom of Ancient Texts
- Science, Economics and Sociology of Sports
- Science, Society and Global Catastrophes
- Universities and Their Role in Community Building
- Healthy Lifestyles

## Proposed UNST Curriculum Structure

### Freshman Competency (0-8 credits)

During freshman orientation, all students are expected to demonstrate competency in English composition and mathematics.

Each competency area is assessed separately. If a student fails an assessment, he/she is required to take one two-credit course to enhance his/her abilities in the corresponding area. At most, four credit hours may be required to meet freshman competency requirements. These credits are not counted toward UNST (University Studies) requirements, and students should be able to make up this time during summer sessions after the first year.

In addition, academic programs are strongly recommended to consider adding competency assessments in information technology and foreign language.

### Freshman Seminar - Required (1 credit)

This course emphasizes the role of the University Studies program and presents a broad overview of the curriculum structure and rationale. It introduces students to a variety of interdisciplinary themes within the UNST program.

### Required Core - Required (24 credits)

Interdisciplinary courses are organized in

thematic "clusters." Collectively, the courses in a cluster ensure coverage of all UNST learning objectives. Approximately 10 clusters will be defined (see **Sample Clusters** above). Each cluster is governed by a committee consisting of faculty members from various disciplines, and each cluster committee establishes the credit structure for the courses (e.g. eight three-credit courses, 12 two-credit courses, other combinations). Some or all courses are team taught. Approximately half of the credits are at the 100 level, and the other half at 200 level.

### Major Specified Core - Required (9 credits)

Selection of these courses is left to individual degree programs provided each of these additional courses add to/reinforces one or more of the learning objectives.

### Capstone Experience - Required (3-6 credits)

The capstone experience is designed and specified by individual degree programs and consistent with UNST goals and objectives. It may include design projects, internships, co-op experiences, foreign study, community projects and more. This is a senior level course.

### Volunteer Service - Required (50 hours) ■



"The cluster concept supports the university's new interdisciplinary focus of having multiple courses built around a central theme. Students will be able to choose their own clusters based on their majors, or not. That's the beauty of it. The interdisciplinary nature of clusters will allow students to be creative in their selection of core courses and they (students) will learn that everything is interrelated."

*Perry Howard, Associate Professor  
Dept. of Natural Resources and Environmental Design*

## Pilot Courses - Fall 2004

Dept.	No.	Course Title	Instructor
ENGL	100	Ideas and their Expression I	Jason DePolo
ENGL	101	Ideas and their Expression II	Shirley Bell
ENGL	101	Ideas and their Expression II	Byron Turman
SPCH	250	Fundamentals of Speech Communication	Myra M. Shird
FOLA	104	Elementary Spanish I	Nita M. Dewberry
MATH	101	Fundamentals of Algebra & Trigonometry I	Kathy Cousins-Cooper
MATH	420	History of Mathematics	Thomas Clarke
BIOL	100	Biological Science	Andrew Goliszek
PHYS	101	Introduction to Astronomy	Chuck Stone
HIST	334	20th and 21st Century Women Activists of the World	Millicent E. Brown
HIST	320	African History through Art and Archaeology	Conchita Ndege Kemei
PHIL	266	Contemporary Moral Problems	Karen Hornsby
POLI	200	An Introduction to American Government	Claude Barnes
COMP	390	Social Implications of Computing	Ray Hawkins
AGEN	216	GIS in Engineering and Natural Resources	Peggy Fersner
AGEN	216	GIS in Engineering and Natural Resources	Godfrey Gayle

# General Education Review and Revision Timeline

## Phase I: Curriculum Review

### Spring 2002

- Gen Ed Core Curriculum Review Committee formed
- Comprehensive review of Gen Ed program

### June 2002

- Summary report completed
- August 2003: Faculty-Staff Institute
- Share plan for Gen Ed review, Gen Ed objectives for further discussion and revision as needed, and a reading list on Gen Ed topics

### Fall 2003

- Accreditation and other constraints on each degree program
- Departments prioritize Gen Ed objectives
- Status report and plan for 2003-04 year given to Faculty Senate
- Relation to community college/UNC articulation agreements
- Meetings with academic programs representatives to agree on Gen Ed objectives
- Wide distribution and comment on Gen Ed objectives including college/school meetings
- Workshops conducted by Gen Ed experts
- Preliminary curriculum aligned with Gen Ed objectives
- External consultants from University of Minnesota and N.C. State University

### Spring 2004

- Preliminary Gen Ed curriculum distributed widely to university faculty
- School/college-based town hall meetings to solicit responses on proposed Gen Ed curriculum

## Phase II: Curriculum Revision

### Spring 2004

- Revised preliminary curriculum based on school/college responses
- Preliminary assessment strategy for Gen Ed program
- Policies for inclusion of courses in Gen Ed curriculum
- General structure of Gen Ed curriculum (e.g., clusters, credit hours, goals and objectives) approved in individual colleges/schools
- General structure of Gen Ed curriculum submitted to Faculty Senate for approval
- Three executive committee members attended AAC&U annual assessment conference in Long Beach, Calif.
- Five committee members attended AAC&U Institute on Gen Ed in Newport, R.I.
- Initial development of pilot courses for implementation in fall 2004

### Summer 2004

- Governance/oversight structure of Gen Ed curriculum finalized
- 21 faculty members engaged in redesigning existing courses to serve as pilot courses in fall 2004
- Pilot courses finalized for fall implementation

### Fall 2004

- University Studies program is born and initial pilot courses offered

### Spring 2005

- Post-course assessment of pilot courses from fall 2004
- Revision of policies and procedures
- Second round of pilot courses offered
- Approval of general education courses for Gen Ed curriculum

### Fall 2005

- Completely revised University Studies curriculum

**Aggie Report** is published biweekly by the North Carolina Agricultural and Technical State University Office of University Relations. Send information to:

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The deadlines to submit information for the next two Aggie Reports are Thursday, Nov. 4, and Nov. 18, 2004.

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## CALENDAR Of Events

### OCTOBER 27

- Employee Appreciation Day, Memorial Union-Exhibit Hall, 11:30 a.m.-1:30 p.m., F
- Desserts & Discussions with the Provost, Oaks Club, 2-4 p.m., F

### OCTOBER 29-30

- Symposium: Practical Solutions for Post-Conflict Liberia Development, Memorial Union-Exhibit Hall and Bennett College-Little Theatre, 8 a.m.-4:30 p.m., F

### OCTOBER 30

- University Day (New Date!)

### NOVEMBER 2

- Election Day
- Last day to register for Practice Graduate School Tests, Gibbs Hall-Rooms 327-329, \$

### NOVEMBER 6

- Practice Graduate School Tests, Gibbs Hall, 9 a.m., R, \$
- Gate City Alumni Chapter 95th Anniversary Celebration, Clarion Hotel-Swing Rd., 6 pm. - 12 a.m., \$

### NOVEMBER 10

- Nursing Career Day, Memorial Union-Exhibit Hall, 1-4 p.m., F

### NOVEMBER 13

- Fall Open House for transfer/adult students, 8:30 a.m.-2 p.m., F (New Date!)

R Registration required    F Free  
I Invitation Only            \$ Admission

The N.C. A&T Ticket Sales Office is located in Brown Hall, corner of Laurel and Bluford streets. For information, call (336) 334-7749.

North Carolina A&T State University

The Renicks were waving and thanking thousands at A&T's Homecoming parade.

Look at that Aggie Pride.

**THANKS** everybody for "The Greatest Homecoming on Earth."

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"I've noticed a difference in student participation in the University Studies pilot course I'm teaching this semester. BIOL 100, for non-science majors, is now a more writing intensive course. In addition to writing reports and essays, students are required to produce a weekly portfolio of current events related to life sciences. Feedback has been positive. Students like the regular writing assignments because their grades aren't totally dependent on exam scores."

Andrew Goliszek, Associate Professor  
Dept. of Biology