

A decorative border surrounds the page, consisting of four thick arrows pointing inward. The top arrow is red, the right arrow is orange, the bottom arrow is grey, and the left arrow is cyan.

# **GOAL II: INTERDISCIPLINARY PROGRAMS AND CENTERS**

A Preliminary Report  
To  
The FUTURES Planning and Resource Council

Submitted By  
Goal II Team

North Carolina A&T State University  
Greensboro, NC 27411  
March 18, 2002



## **GOAL II INTERDISCIPLINARY PROGRAMS AND CENTERS**

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**Deliver visionary and distinctive interdisciplinary academic studies, research, and service and include global collaborations and partnerships as part of the learning experience.**

**CHAIR: Dr. Godfrey Uzochukwu, Professor & Director, Waste Management Institute**

Dr. Claude Barnes, Professor and Chair, Department of Political Science

Lt. Col. Larry Burnett, Battalion Commander, Army ROTC

Ms. Minnie Battle Mayes, Interim Director, Office of International Programs

Dr. Guillermo Cifuentes, Adjunct Faculty, Department of Foreign Languages

Dr. Samuel Owusu-Ofori, Professor, Department of Mechanical Engineering

Dr. Patricia Price-Lea, Interim Dean, School of Nursing

Dr. Kenneth Roberts, Assistant Professor, Department of Chemical Engineering

Dr. Judy Rashid, Interim Dean of Students, Student Affairs

Dr. Teresa Styles, Associate Professor, Department of Speech Communication/Theater Arts

Ms. Dana Valdes Brooks, Office of the Comptroller, Business and Finance

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## Interdi

**The University is committed to producing multidimensional scholars capable of exploring ideas with global perspectives in a cooperative environment.**



# INTERDISCIPLINARY PROGRAMS AND CENTERS SUBCOMMITTEES

- **Interdisciplinary Academic Centers and Institutes**

Dr. Godfrey A. Uzochukwu

Dr. Teresa Styles

Dr. Patricia Price-Lea

Lt. Col. Larry C. Burnett

- **Interdisciplinary Research Centers and Institutes**

Dr. Samuel Owusu-Ofori

Dr. Kenneth Roberts

Ms. Dana Valdes Brooks

Dr. Claude Barnes

- **Interdisciplinary Service Centers/Global Collaborations/Partnerships**

Dr. Judy Rashid

Dr. Claude Barnes

Ms. Minnie Battle Mayes

Dr. Guillermo Cifuentes

Dr. Samuel Owusu-Ofori



## SUBCOMMITTEES, CONTINUED

- **Interdisciplinary Programs and Centers - General Education**

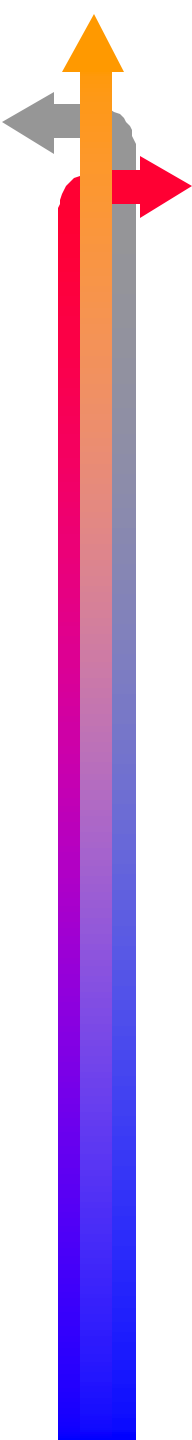
Dr. Claude Barnes

Goal II Team Members

- **Interdisciplinary Writing Center**

Dr. Teresa Styles

Goal II Team Members

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- **THINK BOLDLY!!**
  - Insure campus wide participation /communication
  - Maintain a university - wide perspective

- *Chancellor Renick*

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# Campus-wide Participation/Communication

(Campus Response)

**Interdisciplinary Academic Programs, Colloquia, Symposia,  
Centers, and Institutes**

**Existing (Campus Response):**

- Waste Management Institute
- Center for Student Success
- Army ROTC
- Air Force ROTC
- Academy for Teaching and Learning
- Radio Frequency & Microwave Wireless Communication Program
- National African American Read-In Program
- Physics Colloquium
- Engineering Colloquia
- Biotechnology Program
- GAANN Environmental Fellowship Program
- Pursue Program (MS Program – A&T, NCSU, FSU, and Pembroke)

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## Existing (Campus Response) Continued:

- Prep Program (Ph.D. Program – A&T and VPI)
- International Programs (Global Studies, Study Abroad, and Peace Corps Program)
- Foreign Language Center
- Writing Center (Grammar, Technical, etc.)



## Proposed (Campus Response):

- Center for Multimedia Productions
- Media Management and Policy Institute
- Environmental Justice Center
- Soft Skills Seminar
- Center for Artistic and Humanistic Studies
- Laureate Scholars Program (Lecture Series/Forum)
- Distinguished Student Forum
- Interdisciplinary Ph.D. Program (Energy and Environmental Studies)
- Earth and Environmental Science Program
- Liberal Studies Program

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# Interdisciplinary Research Programs, Centers, and Institutes

## Existing (Campus Response):

- Rockwell Solid State Electronics Laboratory
- Bioinformatics Laboratory
- Biotechnology/Biodiversity Program
- Life and Physical Sciences Research Symposium
- Bridging the Biotech Symposium
- Ron McNair Symposium on Science Frontiers
- Biogeometry Program
- Gamma Sigma Delta Research Excellence Program
- International Trade and Development Center
- Transportation Institute
- Center for Advanced Materials and Smart Structures



## Existing Programs (Campus Response) Continued:

- Center for Energy Research and Technology
- Center for Environmental Remediation
- Center for Aerospace Research
- Center for Composite Materials Research
- Center for Electronics Manufacturing
- Center for Autonomous Control Engineering
- Institute for Human Machine Systems
- Agromedicine Nutrition and Food Safety Program
- Water and Soil Quality Program
- DOE Chair of Excellence in Environmental Disciplines
- NSF Center for Environmentally Responsible Solvents and Processes
- Civil Infrastructure Research Institute



## **Interdisciplinary Research Programs, Centers, and Institutes**

### **Proposed (Campus Response):**

- Center for Nuclear Physics and Engineering
- Laser Facility Laboratory
- Center for Water and Biological Systems
- Center for Food and Agricultural Policy
- Center for Integrated Nutritional Sciences
- Center for Communication and Research
- Wireless Communication and Information Technology Center
- Genomics and Bioinformatics Center



# Interdisciplinary Service/Programs/Centers/Institutes/Global Collaborations/Partnerships

## Existing (Campus Response):

- Small Business Technology Development Center
- The Learning Resources Center
- Center for Early Career Exploration and Leadership
- Small Scale Agriculture Program
- Human and Community Development Program
- Greensboro Area Mathematics and Science Education Center (GAMSEC)
- First Nurse Registered Assistant Program (Animal Sciences, Nursing, and Moses Cone Hospital)
- Family Life Center



## **Existing Programs (Campus Response) Continued:**

- Mattie Reed African Heritage Center
- Applied Survey Research Laboratory
- Domestic Violence Resource Center
- Volunteer Community Service Program
- Student Leadership Development Program
- Service Learning Program



## **Interdisciplinary Service/Programs/Centers/Institutes/Global Collaborations/Partnerships**

### **Proposed (Campus Response):**

- Center for African American Studies
- Center for Service Learning
- Center for the Study and Support of Women and Girls
- Center for University Practicum
- Center for Social Change
- Professional Licensure/Service Program



## General Education Core Curriculum (College of Arts & Sciences)

<b>Areas</b>	<b>Required</b>	<b>Suggested Courses</b>
English	6	English 100, 101
Social Science	6	History 100, 101
Natural Sciences	6	Biological Science 100 Physics 101 Botany 140 Zoology 160 Chemistry 101, 102 EASC 201 NARS 110
Humanities	6	Humanities (ENGL) 200, 201
Mathematics	6	Mathematics 101, 102
Health or P.E.	2	



## African American Courses

- ENGL-333: Survey of Afro-American Literature
- MUSI-220: History of Black Music in America
- MUSI-221: History of Jazz
- FOLA-417: Literature of Afro-French Expression
- HIST-215: History of Africa Since 1800
- HIST-216: History of Africa Since 1800
- HIST-310: The Afro-American in the United States to 1877
- HIST-311: The Afro-American in the United States Since 1877 (A continuation of History 310)
- HIST-320: African History as seen Through African Art and Archaeology
- HIST-328: U.S. Slavery, 1619-1865
- HIST-412: Modernization in Africa from 1920 to the Present
- HIST-416: History of Black Culture in the United States
- POLI-220: Blacks in the American Political System
- POLI-445: Problems of Contemporary Africa
- SOCI-314: Black Experience
- SPCH-302: Minorities in Mass Media

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## Global Studies Courses

- AERO-501: National Security Forces in Contemporary American Society I
- AERO-503: National Security Forces in Contemporary American Society II
- ECON-505: International Economic Relations
- ECON-537: International Marketing
- FOLA-417: Literature of Afro-French Expression
- FOLA-450: La Cultura Hispanica (Formerly Spanish 301, 2543)
- HIST-100: World Civilizations –Part I
- HIST-101: World Civilizations –Part II
- HIST-210: World Regional Geography
- HIST-320: African History as seen through African Art and Archaeology
- HIST-321: Cultural History, Ethnicity and Ethnographic Collections
- HIST-322: Economic Geography
- HIST-327: History of Latin America
- HIST-330: History of the Far East to 1800
- HIST-331: History of the Far East to 1800

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## Global Studies Courses, Continued

- HIST-332: The Modern Middle East
- HIST-412: Modernization in Africa from 1920 to the Present
- POLI-444: International Relations
- POLI-445: Problems of Contemporary Africa
- EASC 309: Physical Geology
- EASC 330: Weather and Climate
- EASC 444: Environmental Issues

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## GOAL II - Challenges

The committee recognizes the challenges of establishing interdisciplinary centers and programs. Challenges include, but are not limited to:

- The need to fuse disciplinary boundaries together
- The need to develop effective communication channels across boundaries
- The need to develop and market credible interdisciplinary academic and research programs



## GOAL II - Strategies

Strategies are being developed to add value to the education of students, faculty and staff. These include:

- Development of international opportunities through study abroad programs, co-ops, seminars, conferences, and workshops
- Globalization of university curricula through establishment of international partnerships
- Enhancement of student, faculty and staff participation in global interdisciplinary experiences and the provision of intellectual as well as financial resources, physical and technological infrastructure to support the programs



## Charge to FUTURES Interdisciplinary Units

GOAL II – Develop processes to enable each interdisciplinary center, institute or program to:

- Establish and implement partnerships with industrial, other educational, governmental or community entities
- Create and implement international study program(s)
- Establish both undergraduate and graduate general education programs



## Best Practices

### Local Activities

The committee finds the need to assess and evaluate existing programs, centers and institutes at North Carolina A&T to determine which ones could be enhanced to fulfill the FUTURES goals. This will be followed by campus-wide survey(s) and conversations to solicit input and ideas for FUTURES interdisciplinary programs, centers, and institutes.

Stakeholders in the Piedmont Triad Area will also be engaged in the process of defining the nature of academic programs.



# The Waste Management Institute (WMI)

## Interdisciplinary Academic Units

- Animal Sciences
- Agricultural Education
- Agricultural Economics
- Architectural Engineering
- Biology
- Business Administration
- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Science
- Communications/Speech
- Construction Mgmt. & Safety
- Economics
- Education
- Electrical Engineering
- History
- Human Env. & Family Sci.
- Industrial Engineering
- Mathematics
- Mechanical Engineering
- Nursing
- Nat. Resources & Env. Design
- Physics
- Political Science
- Psychology
- Sociology/Social Work

The WMI awards both undergraduate and advanced certificates in Waste Management to students who complete the required course work and project/thesis.



## State Activities

**The committee will perform a state search to assess and evaluate existing interdisciplinary initiatives and to identify pertinent models in the State of North Carolina:**

### **The University of North Carolina at Chapel Hill**

- Center for International Studies (Designated by the US Department of Education as a Title VI National Resource Center)

### **East Carolina University in Greenville**

- Center for International Studies



## Regional Activities

**Interdisciplinary programs and centers in the southeast region will be evaluated to determine the most relevant match for Goal II:**

### **Virginia Polytechnic Institute and State University**

- Transportation Institute

### **The University of Florida**

- Center for Latin American Studies (Designated by the US Department of Education as a Title VI National Resource Center)



## **National Activities**

**The committee recognizes that several of the most successful interdisciplinary initiatives exist outside of the southeast region.**

**New York University**

- **Law School Center for International Studies**

**Tufts University**

**Washington State University**

**The University of Michigan – Ann Arbor**



## International Activities

**A major expected outcome of interdisciplinary program and center activities is to enhance the learning environment and global image of A&T. This includes:**

- The preparation and marketing of graduates by providing increased participation in study abroad programs
- International internships
- Opportunities for international service learning

It is, therefore, necessary to seek international collaborators and integrate partnerships in the model(s).



# Memoranda of Understanding

## Between NC A&T and Institutions Abroad

**Bangladesh** – Bangladesh University of Engineering & Technology

**Bulgaria** – American University in Bulgaria

**Costa Rica** – Forester Instituto Internacional (F.I.I.) de Costa Rica  
Universidad Interamericana de Costa Rica, San Jose

**Gabon** – University of Masuku, Franciville

**Ghana** – University of Ghana, Legon  
- Kwame Nkrumah University of Science & Technology, Kumasi

**Korea** – Kangnam University

**Mexico** – Cuahnahuac: Intituto Colectivo de Lengua y Cultura

**Nigeria** – University of Uyo

**Senegal** – Universite Cheikh Anta Diop, Dakar

**Spain** – Carlos III University of Madrid

**School for International Training** – SIT Study Abroad

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## Interdisciplinary Philosophy

**The University is committed to producing multidimensional scholars capable of exploring ideas with global perspectives in a cooperative environment.**

Interdisciplinary studies through seminars, colloquia, symposia, programs, centers, and institutes