

# 2007 Annual Report - College of Natural and Applied Sciences

Departments within the College of Natural and Applied Sciences include:

*Agriculture*

*Computer Science*

*Hospitality and Restaurant Administration*

*Biology*

*Fashion and Interior Design*

*Mathematics*

*Chemistry*

*Geography, Geology & Planning*

*Physics, Astronomy & Material Science*

## Centers/Institutes within the college

*Bull Shoals Field Station*

*OEWR (Ozarks Environmental Water Resources Institute)*

*Center for Grapevine Biotechnology*

*Center for Resource Planning and Management*

*Center for Scientific Research and Education*

*William H. Darr Agricultural Center*

*MVEC (Midwest Viticulture and Enology Center)*

*Baker Observatory*

## I. Academic Information

**General Education** – All CNAS courses have been reviewed as part of the regularly scheduled CGEIP review cycle. At this time all have passed their most recent review. I have asked that any low enrollment general education courses be monitored and assessed to see if we truly need to be offering them. In addition we are working with mathematics to write an action plan for student success in MTH130 and MTH135 (as well as the remedial courses that precede these). Credit hour production in the college for general education is significant.

CNAS courses in the general education program include:

### Basic Required Courses

Computers for Learning - CSC101(2 credits) and CSC111 (3 credits)

Writing II – AGR320 and GLG358 (3 credits)

Contemporary Mathematics - MTH 130 (3 credits)

or

College Algebra - MTH135 (3 credits)

or a higher mathematics course (3-5 credits)

Natural World (laboratory courses indicated with \*) – All students must complete two natural world courses and one must have a laboratory.

Survey of Astronomy – AST114 (4 credits)

\*Basic Astronomy – AST115 (4 credits)

\*Survey of Physics with Laboratory – PHY100 (4 credits)

\*Physics by Inquiry for Educators – PHY101 (4 credits)

\*Introduction to Physics I – PHY123 (4 credits)

\*Foundation of Physics I – PHY203 (5 credits)

\*Biological Science for Educators – BIO100 (4 credits)

Principles of Biological Science – BIO102 (4 credits)

\*General Biology I – BIO121 (4 credits)

\*Fundamentals of Chemistry – CHM105 (5 credits)

Fundamentals of Chemistry – CHM106 (4 credits)

- \*Chemistry for the Citizen – CHM107 (4 credits)
- General Chemistry I – CHM160 (4 credits)
- \*Principles of Geology – GLG110 (4 credits)
- Environmental Geology – GLG171 (4 credits)
- \*Atmospheric Science – GRY135 (4 credits)
- \*Introductory Physical Geography – GRY142 (4 credits)

### Culture and Society

- Technology's Impact on Society – AGR100 (3 credits)
- World Regional Geography – GRY100 (3 credits)
- Ecology and Society – GRY108 (3 credits)
- Understanding Cities – PLN100 (3 credits)

### **Undergraduate Programs -**

We offer BS in secondary education (certifiable 9-12) in Agriculture, Technology (Agriculture Dept), Family and Consumer Sciences (FID Dept), Mathematics, Unified Science, Chemistry, Biology, Earth Science and Physics. (All programs also participate in the MS-Ed degree program but there are typically very few students enrolled in this in any given year.)

All departments offer at least one undergraduate degree program.

### Curriculum (Modifications/Innovations)

Biology faculty revised or wrote new lab manuals for three courses.

GGP faculty are carefully reviewing each degree program. In 2007 they made changes to their geography programs - decreasing the number of required credit hours and adding electives that would advantage other programs with the department. This integration of programs is important for the department as it has many programs.

Collaborative Engineering Program with Missouri University of Science & Technology – A team for CNAS and COBA have been working hard to be ready for a fall 2008 start date.

### Accreditation

We received formal notice in 2007 of full ABET accreditation for our computer science program.

We had our site visit and exit interview for our undergraduate planning program in GGP in fall of 2007. Formal notice will come in spring 2008.

HRA is accredited through ACPHA through 2011.

### Assessment

The following departments presented some assessment data in their annual reports that have caused them to ask more questions – biology and HRA. I am encouraging all departments to take a closer look at the data that they have. We are going to be collecting much more data in the dean's office to distribute to the departments.

### Access

Telecourses – Physics and chemistry. We have one in biology but it has not been offered recently.

Interactive CD – Biology

ITV – Agriculture (Pathways degree completion program with several community colleges.)  
 Online – Agriculture (Pathways and VESTA programs), individual courses in HRA, FID, CS, MTH.  
 Off campus – Agriculture

Student Awards/Recognition

Marc Allison (AG) - Collegiate Farm Bureau Discussion Meet – State Winner  
 Christine Lehman (FID) - First place winner, Edelman Leather Company rug design competition.  
 Justice Alaboson (PAMS) - 2nd Place in Collegiate Division Physics Presentation, Missouri Academy of Science Meeting, City, MO, April 2007.

Undergraduate Student Publications/Presentations

\*We are looking forward to using the new software in the future as it is very, very difficult to figure out who the student co-authors are on various presentations and publications!!!

| Department                      | # of Student Publications | # of Student Presentations or Juried Awards |
|---------------------------------|---------------------------|---|
| Agriculture                     | 2                         | 2   |
| Biology                         | *not labeled in report    | *not labeled in report                      |
| Chemistry                       | 6                         | 6   |
| Computer science                | 1                         | 0   |
| Fashion & Interior Design       | 0                         | 14  |
| Geography, Geology & Planning   | 1                         | 0   |
| Hospitality & Restaurant Admin. | 0                         | 0   |
| Mathematics                     | 0                         | 3   |
| Physics, Astronomy & Mat. Sci.  | 0                         | 7   |

Undergraduate Research

MTH – NSF-REU program in summer of 2007 (first year of funding)  
 CHM – SURF undergraduate research program (funded by alumni donations)

These summer programs recruit students from other institutions to spend the summer at Missouri State University doing research with our faculty. They are outstanding programs for recruiting future graduate students to Missouri State.

**Graduate Programs**

The following programs offer MS degrees – Biology, Chemistry, Mathematics, Material Science, and Geospatial Sciences. In addition computer science and agriculture participate with other graduate programs in the college to offer the interdisciplinary Master of Natural and Applied Sciences (MNAS). Biology, Chemistry and Agriculture work together to offer the Plant Science MS degree program.

Curriculum – No major curricular changes were made to graduate programs in 2007.

Assessment – Most graduate students write a thesis that is defended. A few write a seminar paper. All units have assessment plans.

Access – Because nearly all of the graduate programs require significant laboratory work there are currently no online components to the programs.

## Student Awards/Recognitions

Brian Gall (Bio) – Boritski Scholarship  
Angela Bandy (Bio) – Outstanding Research Assistant  
Ben Anders (Bio) – Chelonian Research Foundation Linnaeus Fund Turtle Research Award  
Ryan Combs (Bio) – Theodore Roosevelt Memorial Fund Grant/American Museum of Natural History  
Ben Anders (Bio) – Turtle Survival Alliance Partner Grant  
Katie Day (Bio) – Bat Conservation International Research Grant  
David Vinyard (Chm) – Rhodes Scholarship District Finalist, Writer’s Hall of Fame, Princeton University  
Hugh Stott Taylor Merit award

## Graduate Student Publications/Presentations

\*We are looking forward to using the new software in the future as it is very, very difficult to figure out who the student co-authors are on various presentations and publications!!!

| Department                      | # of Student Publications | # of Student Presentations |
|---------------------------------|---------------------------|----------------------------|
| Agriculture                     | 9                         | 3                          |
| Biology                         | *not labeled in report    | *not labeled in report     |
| Chemistry                       | 7                         | 12                         |
| Computer science                | 0                         | 1                          |
| Fashion & Interior Design       | No graduate program       | No graduate program        |
| Geography, Geology & Planning   | 19                        | 2                          |
| Hospitality & Restaurant Admin. | No graduate program       | No graduate program        |
| Mathematics                     | *not labeled in report    | 1                          |
| Physics, Astronomy & Mat. Sci.  | *not labeled in report    | 8                          |

## College Enrollment Data Summary

| Department | <b>2007</b> Majors<br>UG/Grad | 2006 Majors<br>UG/Grad | <b>2007</b> Credit<br>Hour<br>production | 2006 Credit<br>Hour<br>Production | <b>2007</b> S/F Ratio |
|------------|-------------------------------|------------------------|--|-----------------------------------|-----------------------|
| AG         | 383/23                        | 358/26                 | 3607                                     | 3399                              | 12.8                  |
| BIO        | 463/55                        | 450/45                 | 6639                                     | 6491                              | 15.4                  |
| CHM        | 153/18                        | 130/14                 | 8053                                     | 8092                              | 21.6                  |
| CS         | 152/1                         | 152/4                  | 2211                                     | 2169                              | 13.3                  |
| FID        | 415/0                         | 438/3                  | 3531                                     | 3592                              | 19.1                  |
| GGP        | 148/28                        | 130/29                 | 6636                                     | 6119                              | 15.8                  |
| HRA        | 273/0                         | 318/0                  | 2386                                     | 2566                              | 20.4                  |
| MTH        | 143/21                        | 149/22                 | 12450                                    | 11900                             | 19.4                  |
| PAMS       | 68/15                         | 66/14                  | 4524                                     | 4191                              | 17.3                  |
| CNAS       | 2198/162                      | 2191/158               | 50180                                    | 48699                             | 17.4                  |

Credit hour production in from 2006 to 2007 increased in AG, BIO, CS, GGP, MTH and PAMS. The other units experienced slight decreases. Overall the college credit hour production increased from 2006-2007. I would attribute the slight decreases in FID and HRA to the department split and the uncertainty among the students. It appears that students are happy now and I expect enrollments to increase in the coming year. Next year we will add engineering to our data summary.

## Assessment Updates

A college ad hoc committee has recommended a new student evaluation tool that will be used college wide. This tool is being printed in early 2008 for first-time use in fall of 2008. We have reviewed NSSE data in our department head meetings. Departments have reviewed their MFAT data and other student assessment tools. Departments are also reviewing the survey data from Faculty Senate.

Program Evaluation – Computer Science wrote a self-study and had an external evaluation in fall of 2007. The department is currently working on an action plan. FID wrote two self-studies in 2007 for CTM and HID. External reviewers will come in early 2008.

## II. FACULTY RESEARCH AND SCHOLARSHIP

Faculty – Outstanding!!!! CNAS faculty won five of the six foundation awards in 2007. The number of publications and presentations is an increased number from 2006.

| Department | Number of Faculty (ranked & instructors) | 2007 Faculty Publications | 2007 Faculty Presentations | 2007 Faculty Juried Products | 2007 Faculty Published textbooks |
|------------|--|---------------------------|----------------------------|------------------------------|----------------------------------|
| AG         | 16                                       | 16                        | 41                         |                              |                                  |
| BIO        | 18                                       | 31                        | 56                         |                              |                                  |
| CHM        | 18                                       | 25                        | 9                          |                              |                                  |
| CS         | 10                                       | 7                         | 4                          |                              |                                  |
| FID        | 9  | 0                         | 6                          | 2                            | 1                                |
| GGP        | 23                                       | 14                        | 47                         |                              |                                  |
| HRA        | 6  | 1                         | 1                          |                              |                                  |
| MTH        | 36                                       | 23                        | 15                         |                              |                                  |
| PAMS       | 15                                       | 17                        | 35                         |                              |                                  |
| CNAS       | 151                                      | 134                       | 214                        | 2                            | 1                                |

### External Grant Funding

CNAS faculty and staff requested nearly \$15,000,000 in external funds in 2006-2007. Of that amount just over \$5,000,000 was funded. The entire list of all funded research is available from the VP of Research and is reported to the BOG at each meeting.

### Efforts to Support and Promote Research

CNAS has funded \$400 incentive grants for faculty to submit significant external grant proposals.

### College Research Plan

The college has a research plan that is reviewed twice each year.

### Journal Editors

Shouchuan Hu, Alicia Mathis serve as editors of journals in their discipline.

### Centers/Institutes in CNAS

CRPM (Center for Resource Planning and Management) – Director – Diane May

This center received nearly \$2 million dollars in external funding in 2007 of which \$1.6 million was SEMA Homeland Security funds. The center does planning projects for a number of communities and agencies in SW Missouri and they involve student interns in their projects. The center is totally self-funded. They receive no university funding except for Diane's faculty line in GGP.

Bull Shoals Field Station – Director – Janice Greene

The education building at the station was completed in 2007. The station hosted three public events, three conferences, nine Missouri State classes, and three other universities during 2007. The station is a research site for several faculty/student research projects. Plans for the future include a dormitory facility.

William H. Darr Agriculture Center – Director – Ben Fuqua

Grand opening of the Pinegar Arena was held in 2007 and the lead gift for the next phase at the Darr center was received the same evening. More than 15 classes use the facilities each year and many student organizations use the center. There are many, many public events at the center. The Darr center needs a manager and custodial help. Currently Agriculture faculty are doing this work. In addition the center needs a usage/business plan so that they might become self-sufficient.

Center for Grapevine Biotechnology – Directors – Laszlo Kovacs and Wenping Qiu

The center has partnerships with University of Missouri-Columbia, Donald Danforth Plant Science Center in St. Louis and University of California. They have funding from USDA, Missouri Wine and Grape Board, and the Missouri Grape Growers Association.

OEWR (Ozarks Environmental Water Resources Institute) – Director – Bob Pavlowsky

The center involves several students in the various research projects. The institute keeps their website up to date. A faculty advisory board was formed in 2007 and met twice with Bob to make sure that the mission and vision remained the same. Bob is to meet with this board at least twice each year. Bob has used direct appropriation moneys to build the infrastructure and now he needs to seek major external research grants to fund the lab. OWERI needs space but there is none available.

Baker Observatory – Directors – Bob Patterson, George Wolf and Mike Reed

There are two large telescopes at the observatory which is NE of Springfield. The observatory holds at least two public viewing sessions each year and it is used frequently by students. There are plans to improve the facility with donor dollars.

### **III. Public Affairs – Community Engagement, Cultural Competence and Ethical Leadership**

Ethical Leadership – Professional ethics is covered in two seminar courses in chemistry. Global warming and other environmental issues are covered in general education chemistry courses. General education biology courses inform students about the ethical issues in environmental conservation and applications of biotechnology.

Student organizations within CNAS help provide leaders for Science Olympiad (CNAS sponsors the regional event on campus each spring), Ozarks Regional Science and Engineering Fair (OSEF) which CNAS helps to sponsor on campus each spring, FFA conferences/competitions, Farm Bureau events, and many, many other events.

Cultural Competence - PAMS hosted an international Thanksgiving Dinner for all CNAS international students which was well attended. This was a wonderful event that was held for the first time in 2007 and we expect it to continue.

CNAS offers several international travel opportunities for students (for credit). In 2007 students traveled to Belize, Canada, Denmark, Greece, China, Italy,

Community Engagement - The following departments participate in service learning – MTH, BIO, CHM, CS, HRA, AG, and GGP. All departments have student organizations that participate in community service projects, tutoring, and other activities.

One of the most important things that we do is host a variety of events on this campus for area K-12 students. These events bring K-12 students to Missouri State University for a variety of events and competitions. Faculty are involved in these events but they always mentor undergraduate and graduate students to play a variety of roles in these events. Some of the events for 2007 include:

Pummill Relays (April) – MTH  
FFA Contests (various times) – AG  
Science Olympiad (February/March) – CNAS  
Ozarks Science and Engineering Fair (April) – CNAS  
Expanding Your Horizons (October/November) – CNAS  
Missouri Innovation Academy (June) – CNAS  
Tours of Chemistry and Physics and Biology Labs (various times) - CNAS

A full listing of these initiatives is being prepared for an October 1, 2008 deadline.

#### **IV. Program Resources**

Faculty Hiring - Faculty hiring in CNAS was successful in 2007. We only had one unsuccessful search and that one was started late. In addition our search committees are doing their work well as evidenced by the two audits that I sat in on with Equity and Diversity. I am confident that we are conducting searches well and I continue to require high standards in all evaluations.

Departmental/College Policies - RPT and Compensations plans were reviewed and rewritten by every department in 2007. Workload policies are being written along with implementation plans by every department. We adopted a new student evaluation tool to use for all classroom evaluations. The tool is at the printers and will be used for the first time in fall of 2008.

Budget Allocation and Management – The CNAS Budget Officer is providing quarterly reports to all departments. She managed our CE and per course budget allocations for departments this year and it seemed to go pretty smoothly. We will be expanding our quarterly reports to include centers/institutes in the future. Our discussion of budget allocations for the coming year are ongoing.

Benchmarking and Delaware Data – Delaware data indicates that the following units are appropriately staffed – Agriculture and Computer Science. The following units are very slightly overstaffed according to Delaware data – Biology, Mathematics, PAMS, GGP (but this combined department would be rare so this data may not be appropriate – we are looking for other benchmarks). The most understaffed department is Chemistry. The data for HRA and FID are incomplete as they were just split in July of 2007.

According to the Delaware data the following departments have appropriate credit hour costs – Agriculture, Biology, GGP, Mathematics, Computer Science and PAMS. Chemistry appears to be underfunded or very, very frugal. There was no data for FID and HRA. Budget allocations in the future will be made to give departments appropriate amounts.



Equipment – Our equipment budgets in CNAS do not match the needs. The equipment budget for the entire college is \$229,500. This includes the money to purchase faculty computers (\$50,000). Typically CNAS has received approximately an additional \$175,000 from the Office of the Provost for additional equipment needs. Since small equipment (computers and other items that are less than \$5000 are now budgeted under educational supplies) it makes it nearly impossible to document our equipment spending from previous years. For example in the previous fiscal year we spent \$350,000 on equipment (items over \$5000) and \$615,000 on educational supplies (equipment less than \$5000 and all other educational supplies).

#### Future Equipment Needs

|      |             |   |
|------|-------------|---|
| FID  | \$59,521    | (Most requests are immediate needs but could be in phases)              |
| AG   | \$651,909   | Requests \$151,600 for FY09, \$197,659 for FY10, and \$302,650 for FY11 |
| CHM  | \$845,000   | (Could be done in phases – major equipment only)                        |
| CHM  | \$79,120    | (This is a five year plan for minor equipment purchases in chemistry)   |
| PAMS | \$1,285,000 | (Could be done in phases – major equipment only)                        |
| PAMS | \$200,000   | (Could be done in phases – minor equipment only)                        |
| HRA  | \$50,600    | (could be done in phases – major equipment only)                        |
| HRA  | \$45,000    | (Could be done in phases – minor equipment only)                        |
| GGP  | \$315,750   | (could be done in phases – major equipment only)                        |

Clearly our current equipment allocation is not enough and we will need an addition \$500,000/year in order to provide current instrumentation for student use in our laboratories.

Space – This issue is the most important and yet has been the most frustrating this year. As a college we have done a great deal of preliminary work but up to this point little has happened because of the many, many projects that are going on at Missouri State. I have reallocated some space. The core storage facility for GGP was allocated space in Kemper Hall that was previously used by PAMS as storage. We are working to find a home for the Temple 449 computer lab as it becomes a research lab soon. We did not get room usage data in 2007 but I understand it is available now. That will be carefully reviewed as we proceed.

I have requested timelines for the following projects in CNAS from Design and Construction.

Kemper Hall – Engineering renovation timeline for Kemper 213? I should have final requirements for 116 soon. When can we meet about the specific walls that need to go up in that space?

Temple, Kemper, Kings Street – FREUP Planning. When can we expect to be doing that? Summer? Fall????

Items discussed in December at meeting in Temple Hall Conference Room – with the promise of a summer 2008 completion

Animal Facility – Put up a building outside of Temple Hall. This needs to happen by summer.

Temple Hall 449 – Renovation to a research lab. This needs to be done by August.

Mountain Grove

Winery – It is my understanding that we will have drawings and cost estimates by early April. Is that correct?

Shepard Hall – What is your timeline for this project at this point?

Bakers Acres – I may have an interested donor with at least a million dollars (maybe more). Any chance we could get some drawings/cost estimates anytime in the near future?

Professional Building – Conversion of hotel room (room 434) to office space - **Project Number: 080228-142**

Chemical Stockroom – Temple Hall 403 (safety issue with fire retardant)

Working with Staff – CNAS is blessed to have outstanding staff to support us.

### Fundraising and Alumni Relations

Departmental/Program Advisory Boards – All departmental advisory boards met at least once this year. Over the past two years dean has attended each meeting at least one time except for mathematics. An engineering advisory board was formed and has met once. The only department without an advisory board at this time is biology and we are working to form one.

#### Scholarships dollars awarded 07-08

| Department   | Amount            |
|--------------|-------------------|
| AGR          | \$ 56,850         |
| BIO          | \$ 6,000          |
| CHM          | \$ 21,450         |
| CNAS         | \$ 15,600         |
| CSC          | \$ 5,000          |
| FID          | \$ 2,800          |
| GGP          | \$ 2,625          |
| HRA          | \$ 2,750          |
| MTH          | \$ 23,000         |
| PAMS         | \$ 3,075          |
| <b>Total</b> | <b>\$ 139,150</b> |

**Designation of Gifts to the Missouri State University Foundation  
Comparison by Fiscal Years**

| FY 06 (July 1, 2005 - June 30, 2006) to FY 08 to date (July 1, 2007 to March 18, 2008) |                 |              |              |                  |                  |                  |  |  |
|--|-----------------|--------------|--------------|------------------|------------------|------------------|--|--|
| Area   | Number of Gifts |              |              | Gift Dollars     |                  |                  |  |  |
|  | <u>FY 06</u>    | <u>FY 07</u> | <u>FY08</u>  | <u>FY 06</u>     | <u>FY 07</u>     | <u>FY08</u>      |  |  |
| Agriculture  | 304             | 370          | 287          | \$ 97,886        | \$252,472        | \$ 74,588        |  |  |
| Biology  | 198             | 207          | 156          | \$ 18,243        | \$ 17,583        | \$ 18,520        |  |  |
| Chemistry  | 144             | 150          | 144          | \$ 25,818        | \$ 79,780        | \$ 28,597        |  |  |
| Computer Science   | 41              | 36           | 41           | \$ 9,310         | \$ 6,403         | \$ 7,371         |  |  |
| Applied Consumer Sciences  | 157             | 223          | 1            | \$ 21,676        | \$ 39,395        | \$ 75            |  |  |
| Geology, Geography and Planning  | 107             | 90           | 109          | \$ 9,125         | \$ 8,070         | \$ 16,085        |  |  |
| Mathematics  | 176             | 181          | 140          | \$ 17,480        | \$ 17,734        | \$ 13,493        |  |  |
| Physics and Astronomy  | 67              | 60           | 34           | \$ 5,342         | \$ 11,184        | \$ 3,955         |  |  |
| General  | 114             | 128          | 89           | \$ 68,612        | \$ 37,435        | \$129,208        |  |  |
| Hospitality & Restaurant Administration  |                 |              | 128          |                  |                  | \$ 46,028        |  |  |
| Fashion & Interior Design  |                 |              | 79           |                  |                  | \$ 9,555         |  |  |
| William H. Darr Agricultural Center  | 3               | 3            | 2            | \$336,981        | \$250,001        | \$484,000        |  |  |
| <b>Natural and Applied Sciences Totals</b>   | <b>1,311</b>    | <b>1,448</b> | <b>1,210</b> | <b>\$610,473</b> | <b>\$720,057</b> | <b>\$831,476</b> |  |  |

## V. Partnerships

- **City Utilities.** Provides three internships each year for GGP undergraduate geospatial science majors.
- **City of Springfield.** Provides three internships each year for GGP undergraduate geospatial science majors.
- **Greene County, Planning and Zoning Department.** Provides two graduate assistantships each year for GGP graduate students.
- **James River Basin Partnership.** Some federal (US-EPA) and state (MO-DNR) funding for OEWRI projects is administered through this partnership.
- **Missouri Department of Natural Resources.** Provided two internships for calendar year 2007 for GGP undergraduate geology science majors.
- **Missouri University of Science and Technology.** Partner institution for joint Graduate Certificate in Geographic Information Systems.
- **Missouri University of Science and Technology.** Collaborative program for electrical and civil engineering.
- Biology Departmental association with National Park Service, Heartland Network
- Biology Department is a member of consortium that supports the Gulf Coast Research Laboratory (University of Southern Mississippi)
- Biology Department is a member of consortium that supports Reis Biological Station (Washington University)
- Written agreement with the Council of Churches of the Ozarks for providing the Therapeutic Riding Program of the Ozarks program.
- PAMS reviewed 21 White Papers and 8 full proposals for the **Leonard Wood Institute** with the goal of them soliciting proposals. Started review of a Full Proposal for the Leonard Wood Institute.

### Continued Goals for 2008

- Student Success – Although we are specifically working on mathematics we are addressing student success throughout the college.
- Program Review/Strategic Planning– Plans of action for improvements in computer science, planning and FID. Self-study prepared for GGP. The college has a comprehensive program review plan which includes CGEIP reviews, accreditations, certifications, program review and any other reviews in one document. This document is reviewed twice each year.
- Resource management/Benchmarking
- Space
- Articulate Public Affairs in the Discipline and play an active role in the public affairs theme.
- Engineering
- Mentor department heads (especially new ones)
- Meeting with faculty, students and alumni just as much as possible!!! Telling their stories.

### New Goals for 2008

- Start meeting with CNAS Faculty Advisory Committee in 2008.
- Implement Digital Measures so that data is readily available for reports.

