College of Science and Engineering Technology (COSET)

2022 STATE OF THE COLLEGE ADDRESS
Overview

Personnel and Centers
Budget
Enrollment, Graduates, and Curriculum
Research and Scholarship
Equipment and Infrastructure
Key Issues for this Year
Personnel and Centers

Deans Office Staff
New Faculty and Staff Introductions
College and University Awards
Promotion and Tenure
Distinguished and Regents’ Professors
Retirements, Emeritus, Deaths
Administrative Appointments
ACE, STEM Center and QEP
Faculty and Student Highlights
Office of the Dean

Dean-John Pascarella

Anne Gaillard and DeLynn Say both moved to Provost Office

Associate Dean-Melinda Holt

Associate Dean-Li-Jen Lester (*new replacing Dr. Gaillard*)

Assistant to the Dean-Angie Burgess

Administrative Coordinator II-Shellie Armstrong (*new position replacing DeLynn Say*)

*New!* Administrative Associate III-Katelyn Conner

Administrative Assistant-Susan Floyd
Agricultural Sciences

Chair: Doug Ullrich

TT Assistant Professor (Agricultural Education): Dr. Mark Hainline
TT Assistant Professor (Equine Science): Dr. Rafael Martinez
TT Assistant Professor (Agricultural Engineering Technology): Dr. Chad Reynolds

Lecturer in Plant Science: Ms. Katelynn Holzapfel

Visiting Assistant Professor (Animal Science): Dr. Kristin Nicholson
Visiting Assistant Professor (Agricultural Education and Agricultural Communication): Dr. Maureen Victoria
Biological Sciences
Chair: Aaron Lynne

TT Assistant Professor (Cell and Molecular Biology): Dr. Sharmin Hasan
Visiting Assistant Professor: Dr. Jill Dewey
Assistant to the Chair: Crystal Radican (promotion)
Administrative Assistant: Harley Matthews
Chemistry
Chair: Donovan Haines

TT Assistant Professor (Physical Chemistry): Dr. Richard Schaugaard
Lab Coordinator/Lecturer: Dr. Samitha Panangala
Computer Science
Chair: Bing Zhou

TT Assistant Professor: Dr. Haodi Jiang
TT Assistant Professor: Dr. Xing Liu
Lecturer: Dr. Pat Ko
Administrative Assistant: Pamela Martin
Engineering Technology
Chair: Faruk Yildiz

TT Assistant Professor in Construction Management
- Dr. Euijin Yang
- Dr. Momen Mousa

Lecturer in Construction Management
- Mr. John WeHunt
Environmental and Geosciences
Chair: John (Pat) Harris

TT Assistant Professor (Climatology): Dr. Josh Gilliland
Mathematics and Statistics
New Chair: Paul Jung

TT Assistant Professors in Mathematics:
Dr. Chi Phan
Dr. Supun Samarakoon

Lecturers in Mathematics:
Dr. Maya Johnson
Ms. Sheri Aajul
Physics and Astronomy
Chair: Joel Walker

Lecturer in Astronomy: Mr. Jeff Wilkins
Please join me in congratulating the winners: Photos will be taken at end of meeting

Graduate Student Excellence in Research – Kayla Mowry (Ag)

Student Excellence in Teaching – Ashar Neyaz (CS)

Adjunct Faculty Excellence in Teaching – Kristi Franks (AG)

Faculty Excellence in Research – James Dent (Physics)

Faculty Excellence in Teaching – Stanley Kelley (AG)

Faculty Excellence in Service – Ryan Saucier (AG)
University Awards

SHSU Excellence in Service- Madhusadan Choudhary (Biological Sciences)
SHSU Excellence in Teaching– Renee James (Physics and Astronomy)
SHSU Staff Award-Shellie Armstrong (Dean’s Office)
SHSU Academic Affairs Loyalty Award-Shellie Armstrong (Dean’s Office)

Finalist for SHSU Academic Affairs Spirit Award-Anne Weathersby
Tenure and Promotion to Associate Professor

- Danhong Chen (Agricultural Sciences)
- Ulan Dakeev (Engineering Technology)
- Ross Guida (Environmental and Geosciences)

Promotion to Professor

- Qingzhong (Frank) Liu (Computer Science)
- Narasimha Karpoor Shashidhar (Computer Science)
- Falguni Mukherjee (Environmental and Geosciences)
Distinguished Professor

Bill Lutterschmidt, Biological Sciences
TSUS Regents Professor

Bill Lutterschmidt, Biological Sciences
5 Retirements (114 yrs of service)

Jim Tiller, Environmental and Geosciences (50 years)
Jianzhong Wang, Mathematics (28 years)
Richard Norman, Chemistry (16 years)
Mary Shelton, Mathematics (16 years)
Richard Ford, Agricultural Sciences (4 years)

We wish you the best in your retirement!
Emeritus Professor
Richard Norman, Chemistry
Deaths

Dr. Jihuang Ji (retired from COSC in 2017 after serving 27 years)
Academic Excellence-Faculty

Dr. Rafael Martinez (AGSC) named a Kike Garza USDA Fellow

Dr. Ryan Saucier (AGSC) received a National FFA VIP Award for work with National FFA Career Development Events

Dr. Juan Daza (BIOL) described the oldest fossil species of Gecko from Europe

Dt. Tami Cook (BIOL) named President of the American Society of Parasitolgists

Dr. Adrian Villalta-Cerdas (CHEM) spent summer at Indianapolis Museum of Art at Newfields as part of Project MUSE on integration of art conservation science

Artwork from Dr. Meagan Hinze (CHEM) coauthored paper featured on cover of Nature

Dr. Kirk Burns (COSC) recognized as 2021 Cyberscoop award winner in area of Security Pioneer.

Dr. John Strait (ENVGEO) invited to join Advisory Board of the Muddy Waters Museum in Chicago, IL

Award named permanently for Dr. Linda Zientek (MATH) at the SERA meeting

Dr. Melinda Holt (MATH) elected to BOD of American Statistical Association

Dr. Emma Bullock (MATH) elected to board of Mixed Methods International Research Association

Dr. Joel Walker (PHYS) named a KITP “Fellow” at the Kavli Institute for Theoretical Physics at UC-Santa Barbara, spent 7 weeks in residence; Dr. James Dent named a KITP “Scholar”
COSET Faculty in Administration

Anne Gaillard (Biology), Vice Provost

Chad Hargrave (Biology), Associate Provost of Research/Chief Research Officer

Brian Loft (Mathematics), Associate Vice Provost for Grants (ORSP)

Patrick Lewis (Biology), Associate Dean, Honors College

Falgungi Mukherjee (Environmental and Geosciences)-University Ombudsperson
Academic Community Engagement (ACE)

- **WHAT IS ACE?**
  ACE IS A TEACHING METHOD THAT COMBINES COMMUNITY ENGAGEMENT WITH ACADEMIC INSTRUCTION.

- **BENEFITS OF ACE?**
  - *For Faculty:* directly links teaching, research and service
  - *For Students:* incorporation of course concepts with real-world learning opportunities
  - *For Community:* opportunity to interact with university – generates an overall positive influence

**GOALS FOR ACE IN COSET**
- STRENGTHEN EXISTING ACE OFFERINGS
- INCREASE THE NUMBER OF ACE CLASSES
- ENABLE MORE STUDENTS TO EXPERIENCE AN ACE COURSE IN COSET
- ESTABLISH DEPARTMENT-SPECIFIC VISIONS TO GUIDE THE FUTURE OF ACE
Academic Community Engagement (ACE)

FACULTY SUPPORT FOR ACE

COSET ACE COLLEGE COORDINATOR
JEFF WOZNIAK (BIOLOGY)
WOZNIAK@SHSU.EDU

COSET ACE ADVISORY COMMITTEE
• Tim Pannkuk - Agricultural Sciences
• Justin Williams - Biological Sciences
• Adrian Villalta-Cerdas - Chemistry
• Cihan Varol - Computer Science
• Min Suh - Engineering Technology
• Velvet Nelson - Environmental & Geosciences
• Naomi Krawzik - Mathematics & Statistics
• Hui Fang - Physics & Astronomy

Upcoming Faculty Training Session:
“What is ACE and How do I ACE a Class?”
The STEM Center (2021-2022)

Prepare Students for Success
• 2022 Summer Bridge: 2 week program for students entering Calculus, Precalculus, General Chemistry I or II, Engineering Technology.
  o 101 Students registered (75 participants), 9 Faculty, 8 student TAs
• Workshops for preparing applications for REU, Graduate School, Internships
• Chemistry: 2 week Learning Frameworks curriculum during Lab time with ASC
• Fall 2022: Facilitated Study Groups: Calculus, Chemistry

Promote Active Learning
• Faculty mini grant program – funded 9 new projects (new cycle in December)
• Faculty writing retreat (November)
• April: Be(e ) STEM Symposium – 52 participants, 17 speakers from SHSU + 7 TX institutions.

Engage Students in Research
• Ramps into Research training modules – first cohort in testing, regular working lunches
• Looking for more training modules to develop!

We want to hear from you:
QEP (Quality Enhancement Plan) - Active Learning

Faculty/Staff Participants (AGSC-4, BIOL-5, CHEM-7, COSC-10, ETEC-6, ENVGEOL-5, MATHSTAT-11, PHYSASTR-3)-51 participants!

13 in the Engaging Exploration Workshop

5 in ACUE Course in Effective Teaching Practices

5 in Engaged Learning Fellowships

21 received Teaching Innovation Grants in 2021 or 21-22

6 received Odyssey Travel Grants

2 Engaging Spaces Classroom Renovations

11 participated in Teaching Dimensions Observation Protocols

5 participated in Engaging Classrooms Week

One is on the Engaging Spaces Committee

and 2 are on the Engaging Classrooms QEP development committee

Thank you for your participation!
Student Access & Success

Over 1200 High School FFA members participated in December event at SHSU

SHSU Rodeo livestreamed the Conroe rodeo with over 3900 viewers

Ellen Thompson (BIOL) won best presentation at Gulf Coast Undergraduate Research Symposium at Rice University

6 BIOL students gave presentations at the national meeting of American Society of Parasitologists

Carolyn Jess (ENVGEO) awarded TSUS Regents’ Student Scholar Award in Fall 2021

Three ETEC students did internships at TESLA and two got job offers

First graduates of PhD program in summer 2022-Both secured tenure track positions in cybersecurity!

Two CS graduate students selected as finalists of the DOD Cyber Scholarship

COSET had six award winners at Sammy’s

Ten physics students went to the international “Phenomenology” conference at the University of Pittsburgh in May 2022. These students have worked on NSF-supported research projects with Professors Dent, Shepherd, and Walker, and this trip is funded by their recent 2022-2024 grant.
Budget

Overview of Budget
New Initiative Funding
HEAF Funding
Additional Revenue Sources
Gifts to COSET
COSET Endowments
COSET Budget

Revenue for budget
- Enrollment dependent includes local and state tuition, departmental revenue accounts, college portion of distance learning fee (budgeted and fund balance), lab fee, and COSET program fee (budgeted and fund balance);
- Non-enrollment dependent includes HEAF funding, new initiative funding endowment distributions, annual gifts, direct and indirect grant funding, and internal funding transfers (AA, QEP, ORSP, etc).

Expenses in budget include personnel salary and benefits, departmental O&M (student wages, equipment, materials and supplies, travel), research support, and scholarships.

Budget model used is Base budget from last year + New Initiatives + HEAF ($)

Base budget is based on assumption of flat enrollment (currently behind predictions – budget shortfall being filled with reserve funds for FY23)
Funded Budget Initiatives FY23

Last year’s funded initiatives included hiring TT Computer Science, Lecturer in Engineering Technology Construction Management, Lecturer in Mathematics, Lab Coordinator/Lecturer in Organic Chemistry, return of 3 TA to COSET that were cut in FY20.

We asked for funding for increased student wages, increased graduate assistantship funds, new faculty and staff positions, and increased department O&M.

Due to enrollment declines, we did not receive any new funding this year.
HEAF Funding FY23

Higher Education Assistance Fund (HEAF) ($)

- In FY22, received $455,929 for startup, renovation, teaching and research equipment.

- In FY23, we are allocated $300,000 for Start-up for new TT Faculty in AG, BIOL, CHEM, CS, ETEC: Only for equipment and capital purchases. Received additional $100,000 in start-up from Provost for new faculty in AG and ENVGEKO in FY22.

- No new funding for teaching or research equipment or for capital projects renovation.
Additional Revenue Sources

Non-majors lab ($16/student/lab) FY23 is $149,056 an increase from FY22 of $6432 ($142,624). Fees used to purchase consumable materials and supplies. Does not roll/must be spent every year.

Proposing to increase to $24/student/lab due to inflation

COSET Majors Program Fee is $50/Fall and Spring semester, $25 in summer semesters: FY23 is $284,552, an increase from FY22 of $1141 ($283,411). Used by departments for use in lab support costs (materials, renovations, equipment, upgrades, software) and lab assistant student salaries. Unexpended does roll.

Fund Balance from FY21 was used to support Astronomy Observatory renovation cost increase and a new pickup for the Biology Field Station

Distance Learning Fee: Received $860,567, a decrease of $150,637 from FY22 ($1,011,204). This was due to both a new tax from AA (10%) and reduced online offerings compared to pandemic. The DLF fee supports graduate assistantships, salaries and benefits for faculty and staff, and undergraduate and graduate scholarships.

Fixed Costs-Received $1500 in fixed costs increase for security cameras in Pirkle (ETEC)
Other Budget Items

No Merit in FY22 due to enrollment drop

Merit in FY23 will depend on enrollment in Fall and Spring

August Stipend for FT Salaried Faculty and Staff ($255,000 for COSET)

All departments in COSET moving to minimum $10/hr student wage
  ◦ Faculty with grants will need to pay this minimum going forward (does not apply to current grants if wages were budgeted less than this amount)
  ◦ No new funding to pay for this increase, will impact both department O&M and Program Fee Funding-this was our top New Initiative Request in FY22 (was not funded), will be a top request in FY23
  ◦ Needed as students were choosing other on-campus or off-campus jobs paying higher wages
Gifts to COSET (7/1/21-6/30/22)  
$1,530,184

Agricultural Sciences- $491,589
Biological Sciences-$72,498
Chemistry- $6,024
Computer Sciences-$3,527
Engineering Technology-$16,764
Environmental and Geosciences-$502,754
Mathematics and Statistics-$23,139
Physics and Astronomy-$355,298
College-$58,591

COSET raised the most amount of funding of any SHSU College through the Annual Faculty/Staff Giving Campaign in 2021-2022 (over $30,000 from COSET). Thank you for your support. This is the third year in a row we have raised the most funds of any unit! We now raised the most $ 4 out of the last 10 years.

Big gifts this year to ENVGEO ($500,000 Scholarship from Chuck Caughey 2-year scholarship for Geology transfer student) and Physics (Dominey Observatory renovation gift of $350,000), tripled funding from FY21
Endowment Funding

Fred Pirkle Faculty Enrichment Endowments: 1 TT Position, Quanta Endowment: 1 Visiting Position, Roland Black Endowment: Research Support for TT Professor, Gibbs Chemistry Endowment: Summer Faculty Research Support, Fred Pirkle Scholarships-$5000 scholarships for AGET and ETEC majors

Over $1,500,000 in scholarships
Enrollment, SCH and Graduates
University Enrollment/SCH as of 8/17/2022

Head Count down 2.1% compared to 21
- Undergrad down 1%
- Grad down 8.3%
  - First-time Freshman up 14.9%
  - First-time Transfer down 22%
  - First-time MS down 36%
  - First-time Doctoral down 46%

Total SCH down -0.81% compared to 21
- Undergrad down -0.04%
- Grad down -9.3%
  - First-time Freshman up 13.9%
  - First-time Transfer down -20.3%
  - First-time MS down -34.7%
  - First-time Doctoral down -45.2%
College Enrollment/SCH (8/17/22)

Head Count up 2.3% compared to 21
- Undergrad up 3.7% (3397 to 3523) (COE and CHSS up, all others down)
- Grad down -13.4% (299 to 259) (all down except COHS which is up <1%)
  - #1 by enrollment at undergraduate level (COCJ #2 at 3245)
  - #5 by enrollment at graduate level (COE #1, COBA, CHSS, COCJ 1-4, COHS #6, CAM #7)

Total SCH of COSET courses up 1.71% compared to 21 (59,496 to 60,511)
- 24.4% of all SCH are from COSET
# SCH-Fall 2022, 2021

Data from //class day –5 (8/17/2022)

<table>
<thead>
<tr>
<th>College</th>
<th>2021</th>
<th>2022</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Affairs</td>
<td>1,973</td>
<td>2,070</td>
<td>4.92%</td>
</tr>
<tr>
<td>Arts and Media</td>
<td>23,814</td>
<td>23,091</td>
<td>-3.04%</td>
</tr>
<tr>
<td>Business Administration</td>
<td>33,499</td>
<td>32,459</td>
<td>-3.10%</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>26,644</td>
<td>27,059</td>
<td>1.56%</td>
</tr>
<tr>
<td>Education</td>
<td>21,189</td>
<td>19,616</td>
<td>-7.42%</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>20,760</td>
<td>20,553</td>
<td>-1.00%</td>
</tr>
<tr>
<td>Humanities and Social Sciences</td>
<td>62,809</td>
<td>62,800</td>
<td>-0.01%</td>
</tr>
<tr>
<td>Science and Engineering Technology</td>
<td>59,496</td>
<td>60,511</td>
<td>1.71%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>250,184</td>
<td>248,159</td>
<td>-0.81%</td>
</tr>
</tbody>
</table>
## Undergraduates in COSET

Data (8/17/2022)-compared to 2021  3523/3397 (+78 with Ed/COSET dbl majors)
Green Font +20% increase, Blue Font +10% increase, Red Font >10% decrease

<table>
<thead>
<tr>
<th>Field</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Science</td>
<td>600/535</td>
<td></td>
</tr>
<tr>
<td>Biomedical Sciences</td>
<td>388/408</td>
<td></td>
</tr>
<tr>
<td>Biology (BA, BS)</td>
<td>313/372</td>
<td></td>
</tr>
<tr>
<td>Forensic Chemistry</td>
<td>305/297</td>
<td></td>
</tr>
<tr>
<td>Computing Science</td>
<td>274/212</td>
<td></td>
</tr>
<tr>
<td>Construction Management</td>
<td>264/272</td>
<td></td>
</tr>
<tr>
<td>Ag Business/Teaching</td>
<td>165/154</td>
<td></td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>139/104</td>
<td></td>
</tr>
<tr>
<td>Software Engineering</td>
<td>117/101</td>
<td></td>
</tr>
<tr>
<td>Mechanical Eng. Tech.</td>
<td>111/49</td>
<td></td>
</tr>
<tr>
<td>Math/Ed and Math</td>
<td>106/116</td>
<td></td>
</tr>
<tr>
<td>Engineering Design Tech.</td>
<td>83/72</td>
<td></td>
</tr>
<tr>
<td>Elec/Computer Eng. Tech</td>
<td>82/66</td>
<td></td>
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<tr>
<td>Ag. Eng. Tech/Teaching</td>
<td>82/81</td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>74/78</td>
<td></td>
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<tr>
<td>Engineering Technology</td>
<td>69/106</td>
<td></td>
</tr>
<tr>
<td>Interdisc. Ag/Ed and IAG</td>
<td>69/74</td>
<td></td>
</tr>
<tr>
<td>Applied Arts and Sciences</td>
<td>66/85</td>
<td></td>
</tr>
<tr>
<td>Plant and Soil Science/Teach</td>
<td>56/60</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>55/47</td>
<td></td>
</tr>
<tr>
<td>Geography (BA, BS)</td>
<td>48/46</td>
<td></td>
</tr>
<tr>
<td>Geology</td>
<td>44/41</td>
<td></td>
</tr>
<tr>
<td>Composite Science/Ed &amp; CS</td>
<td>38/37</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>33/30</td>
<td></td>
</tr>
<tr>
<td>Physics Civil Eng Trans</td>
<td>4/0</td>
<td></td>
</tr>
<tr>
<td>Physics Electr Eng Trans</td>
<td>5/0</td>
<td></td>
</tr>
<tr>
<td>Physics Mech Eng Trans</td>
<td>7/0</td>
<td></td>
</tr>
<tr>
<td>Agricultural Communications</td>
<td>26/24</td>
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</table>
Graduate Students in COSET

Data as of 8/17/2022, compared to 2021

**Doctoral**

<table>
<thead>
<tr>
<th>Program</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital and Cyber Forensic Science</td>
<td>12</td>
<td>20</td>
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</table>

**Masters**

<table>
<thead>
<tr>
<th>Program</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>Sustainable Agriculture</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>Biology</td>
<td>41</td>
<td>44</td>
</tr>
<tr>
<td>Chemistry</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Computing and Data Science</td>
<td>22</td>
<td>13</td>
</tr>
<tr>
<td>Digital Forensics</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Information Assurance &amp; Cybersecurity</td>
<td>27</td>
<td>44</td>
</tr>
<tr>
<td>Geographic Information Systems</td>
<td>26</td>
<td>31</td>
</tr>
<tr>
<td>Mathematics (MA, MS)</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Statistics</td>
<td>14</td>
<td>13</td>
</tr>
</tbody>
</table>

**Graduate Certificate**

<table>
<thead>
<tr>
<th>Program</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyber Security</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Data Assurance</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Digital Investigation</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Geographic Information Systems</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
### COSET Graduates (22/21)

<table>
<thead>
<tr>
<th></th>
<th>Fall 2021/ Fall 2020</th>
<th>Spring 2022/ Spring 2021</th>
<th>Summer 2022/ Summer 2021</th>
<th>Total AY22/ AY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>229/273</td>
<td>308/315</td>
<td>108/105</td>
<td>645/693</td>
</tr>
<tr>
<td>Graduate</td>
<td>27/30</td>
<td>45/32</td>
<td>36/16</td>
<td>108/78</td>
</tr>
<tr>
<td>Total</td>
<td>256/303</td>
<td>353/347</td>
<td>144/121</td>
<td>753/771</td>
</tr>
</tbody>
</table>

Total graduates down 2.3%.
Undergraduates down 7%.
Graduates up 38%.
Research and Scholarship
Office of Graduate Studies

COSET 3MT (3 minute thesis) Jacob Brandon (AG) won People’s Choice Award

ASPIRE/ROAD Scholars-
Alumni-Fall 21 Jovinna Mendel (BIOL), Spring 22 (Antonio Meza (BIOL), Summer 2022 David Farris (BIOL)
Active-Andrew Aoueille (MATH)
Internal Faculty Research Grants

59 proposal for $482,288 were received by ORSP

36 were funded for a total of $274,126.

COSET had 7 funded (19% of total) at $57,574 funded (21% of all funding awarded)
Internal Faculty Research Grants

Amy Ray (Mathematics Education)-Evidence of student work tasks embedded in MATH 1384/1385/3381 Curriculum materials: opportunities for elementary pre-service teachers to critique the reasoning of others; $5,000 (New Faculty)

Amar Rasheed (Computer Science)-Exploring dynamic power analysis on IoT devices for anomaly detection; $5,000 (New Faculty)

Cihan Varol (Computer Science)-Vehicle Infotainment System Forensics; $10,310 (Pilot Studies)

James Harper (Biological Sciences)-Plasticizers, climate change, and the heat stress response in speckled cockroaches; $14,953 (Pilot Studies)

ABM Islam (Computer Science)-Machine learning-based sentiment analysis for predicting problematical eating behavior; $14,609 (Pilot Studies)

Falguni Mukherjee (Environmental and Geosciences)-Assessing the impacts of urban sprawl on environmental health of urban areas-an examination using satellite data; $4,570 (Individual Scholarship)

Ebrahim Karan (Engineering Technology)-Building community resilience in the food-energy-water and society nexus; $3,132 (Individual Scholarship)
EURECA Grants ($34,300)

Philip Urso (Agricultural Sciences)-Effects of Vitamin E at various time points on conception success in captive White-Tailed Deer ($6300)

Jim Harper (Biological Sciences)-Effects of bisphenol on the integrated stress response in speckled cockroaches ($6000)

Suleiman Obeidat (Engineering Technology)-Study on the mechanical properties of 316L stainless steel 3D printed parts made by (FDM/FFF) Technology ($6000)

Don Albert (Environmental and Geosciences)-The forgotten women of the Bounty: Socio-cultural and spatial legacies of Pitcairn Island Tapa (Barkcloth) ($6000)

Emma Bullock (Mathematics and Statistics) and Jamile Forcelinii (World Languages and Culture)-Understanding barriers that limit student success in online courses: a meta-analysis ($10,000)
COSET Dean’s Office Funding for Undergraduate Research ($26,320)

Dean uses indirect funds to support Undergraduate Research Program

Funded undergraduate students through COSET Undergraduate Research Program ($26,000)

- 4 awards in spring 2022 with 8 students and 4 faculty
- 3 awards in summer 2022 with 4 students and 3 faculty
Assessment Mini-Grants 2022 ($1000 per grant, due in May)

Dr. Emma Bullock, Dr. Beth Cory, and Dr. Amy Ray, Department of Mathematics and Statistics
*Developing a Reliable and Valid Vocabulary Assessment for MATH 1385*

Dr. Amy Ray, Dr. Emma Bullock, and Dr. Mary Swarthout, Department of Mathematics and Statistics
*Developing Reliable and Valid Vocabulary Assessment for Math 1384*

Dr. Taylor Martin and Dr. Beth Cory, Department of Mathematics and Statistics
*Developing a Calculus I Concept Inventory Assessment - Stage 1*
Professional Development Leaves for FY23

Funded by Academic Affairs

Dr. Madhusadan Choudhary (Biological Sciences)-Fall 2022 (in Patna, India)

Dr. William Lutterschmidt (Biological Sciences)-Spring 2023 (at UC Irvine)

Dr. Renee James completed a FY22 leave in Australia. Welcome Back!

Congratulations and best wishes on a productive leave!
## External Funding (7/1/21-7/1/22)

<table>
<thead>
<tr>
<th>Department</th>
<th># New Apps</th>
<th>$ New Apps</th>
<th># Grants Awarded</th>
<th>$ New Awards</th>
<th># Active Awards</th>
<th>$ spent active grants</th>
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<tr>
<td>Agricultural Sciences</td>
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<td><strong>Total (21-22)</strong></td>
<td>62</td>
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<td><strong>Last Year (20-21)</strong></td>
<td>76</td>
<td>$18,830,582</td>
<td>27</td>
<td>$1,593,575</td>
<td>21</td>
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Selected Grant Activity

2nd year of the Biology-Computer Science NSF funded REU (Cho and Choudhary)

1st Year of the Pollinators of East Texas grant (Williams et al from SHSU and D. Bennett from SFA)

Multi-investigator award from NSF to Dent, Shephard and Walker (Physics)

Data Science Pathway on Zeus Platform: Online training in Data Science funded by THECB Governors Emergency Education Relief Funding - Accelerating Credentials of Purposes and Value Grant Program to Zhou (CS)

GenCyber Capacity-Building @ SHSU, the NSA award number GC-22-TX-SHSU-B2 (CS)

NSF-GET TX hosted high school and community college students for 10 day summer bridge program about all things geoscience (ENVGEO) to Moss
Equipment and Infrastructure
Infrastructure

Gibbs Ranch Phase 1-Ground breaking ceremony held on August 5th, to be ready by Fall 2023
New Pickup Truck-Replaced 22-year-old pickup at Biological Field Station with new Ford F150
Building Renovations

All projects met with increased costs due to inflation and supply chain problems; some projects were scaled back in done in phases with funding available only for phase 1

Environmental and Geosciences began Engaging Spaces award for LDB 339 and AC replacement in LDB Annex- Engaging spaces delayed until Winter Break and Facilities took over replacement of AC unit in Lee Drain Annex (Geology labs) from COSET-waiting on AC (backordered)

Computer Sciences began 2022 Engaging Spaces award for lab redesign (completed)

Physics began renovations of Farrington space for 2nd Astronomy Lab-ongoing

Both LDB and Farrington had facelifts (new paint, carpeting, ceiling tiles, lights, and furniture); atrium glass replaced in LDB
NEW CS Engaged Space Lab
Dominey Astronomy Park

Park plan has been finalized

Additional gift of $200,000 to fund a new telescope was donated last week along with initial gift of $350,000 (Dominey family)

Will be seeking additional funding for remote controlled telescopes for online Astronomy students
Academics

SHSU officially recognized with HSI (Hispanic Serving Institution) status
  ◦ Over 25% students self-identify as Hispanic

SHSU promoted from Doctoral Research University (DRU) to Doctoral University-High Research Activity (R2), reflecting increased external funding and PhD production

SHSU joined Academic Engagement Network of US Cyber Command (Dec. 21)

Both BS in Computing Science and BS in Construction Management (ETEC) received accreditation from ABET (CS-recurring, Construction Management-Initial)
National Center for Academic Excellence Award in Cyber Defense Education-BS in Computing Science concentration in Information Assurance
Program Development

- BS in Data Science-passed out of curriculum review, to board for approval
- New 4+1 BS/MS option in Computing and Data Science
- New MS certificates in Data Science
- BS in Civil Engineering Technology-in review
- MS in Engineering Technology and Management-in review
- BS in Mechanical Engineering-in development
- Minor in Hemp Science-in development
- Astronomy minor now in catalog

- All programs in all departments will undergo a Program Health Check by Academic Affairs that will assess employment demand, job openings, and enrollment and graduation numbers
  - Need to be strategic and efficient in course and program offerings (minors, concentrations, majors)
Renewed MOU with Firat University (Elazig, Turkey) for 2+2 program in Software Engineering
International Activities

Were unable to offer Study Abroad in 2022

Study Abroad 2023
  ◦ AGSC-France, CS-Taiwan, ETEC-South Korea

Study Abroad 2024
  ◦ CHEM-Hungary

Dr. Joe Hill (ENVGEO) led International Geology field camp in Spain (2022)
Dr. Renee James spent professional development leave in Australia (2022)
Dr. Ulan Dakeev (ETEC) organized visit of Alatoo university president from Kyrgyzstan and his delegation to SHSU campus.
Dr. Choudhary is spending professional development leave at Patna University in India (Fall 2022)

Dean Pascarella will be in France in October through a Fulbright International Administrators Award, visiting universities and higher education officials. Will look to identify potential partners for study abroad, exchange. Currently have a partnership with Purpan University in Toulouse (Agricultural Sciences)
Issues for This Year

Strategic Planning

Student Success Initiatives-Dr. Melinda Holt
  ◦ DFW Process Mapping

Inclusion Initiatives-Dr. Li-Jen Lester

DPTAC changes and new procedures
Priorities for 2022-2023

New SHSU Strategic Plan

**Strategic Priorities**

- Prioritize Student Success and Student Access
- Embody a Culture of Excellence
- Elevate the Reputation and Visibility of SHSU
- Expand and Elevate our Service to the State and Beyond

Engage in Strategic Planning Forums-need faculty input on Strategic Priority 2-goal 1: Academic Excellence

  - Dean Ron Shields and VP Chad Hargrave are co-chairs of this goal
  - Want to identify 3-4 objectives and KPI by end of fall Semester
MATH 1420 and CHEM 1411 Student Success Initiatives

Project Partners: Chemistry, Mathematics and Statistics, STEM Center, PACE, Academic Success Center, and COSET

MATH 1420
- Re-envisioning the pathway between MATH 1314, 1410, and 1420
  - Prerequisites
  - Placement
  - Content mapping and alignment
- Enhancing classroom support
  - Just-in-time videos
  - Mentored/directed study groups
  - Potential co-requisites
  - Meta-cognition and study habit development
- Developing assessment research

CHEM 1411
- Enhancing classroom support
  - QEP grant for virtual active learning tools
  - Learning frameworks workshops
  - Mentored/directed study groups
  - Increased/improved lab assistant support
  - Calculator access
  - Attendance initiatives
- Analyzing institutional and classroom data
Focus on Whole Student Needs and Retention

This fall, provost will be highlighting faculty who focus on whole student needs

◦ For example, 80% of students work, with time management critical
◦ Many students are food-insecure, using Food Pantry
◦ Commuter students feeling inflation impacts on gas prices

With lower enrollment and decreasing transfer inputs, retaining more students will help with maintenance of enrollment, stabilizing university budgets

◦ Does not call for lowering academic standards but being aware of these issues in your approach to students, syllabi and flexibility.
What brings **YOU** into the diversity space?
DPTAC and Standards

Each tenure unit will need to develop written performance standards in accordance with recent revisions to academic policies on *Faculty Reappointment, Tenure, and Promotion of Tenured and Tenure-Track Faculty* (900417), *The Faculty Evaluation System of Tenured and Tenure-Track Faculty* (820317), and *Performance Evaluation of Tenured Faculty* (980204). It is important that all tenured and tenure-track faculty in the tenure unit collaborate in developing performance standards and that standards have the approval of the department chair and college dean prior to submission to the Office of the Provost. A link for submitting performance standards will be available on the provost’s Tenure Unit Standards webpage (link to follow later this month). The deadline for submission is **November 30, 2022**. Once approved by the Office of the Provost, performance standards will be posted on the Tenure Unit Standards page for easy access.

**NOTE:** Do not have to update current standards but should verify that current standards remain appropriate.
DPTAC updates

DPTAC

◦ New unit in Environmental and Geosciences replaces separate DPTAC for Geography and Geology, will need new unit standards.
◦ New unit in ETEC for faculty in years 1-3 of pre-tenure, faculty in years 4-6 continue with combined AGSC/ETEC DPTAC, will need standards.
◦ Each DPTAC will select a Chair no later than Nov. 3. Dept Chair and Dean will review and agree/not agree. If not agree, Chair and or Dean will meet with DPTAC to review concerns.
◦ All Associate Professors except those in 1st year of rank will be reviewed annually by DPTAC Full Professors with goal to identify performance relative to standards for Promotion to Full. Previously, most departments only did this for those seeking promotion to Full.
◦ For tenure, consideration of collegiality no longer applies as a separate area but can be referenced in relation to teaching, scholarship and service areas.
Welcome back and have a great Fall Semester!