



Missouri University of Science and Technology

Faculty Senate Meeting

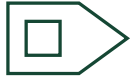
October 19, 2023

Meeting procedure

- Only Senators may debate motions
- Only Senators can vote
- If you are not a Senator, or a proxy, you cannot vote or debate
- Do not speak over someone, or out of order
 - Raise your hand (For those online please use “Raise Hand” on the Zoom app)
 - The President will call on you and then you will have the floor
 - Please wait for the microphone
- Unless you have been recognized (told you have the floor), you may not speak

Meeting Minutes

- Robert's Rules of Order say that meeting minutes are simply a summary of what happened at the meeting.
- They are not a play by play of everything that happened or what members said.
- We will be using Robert's Rules to guide our recording of minutes.
- If needed, Faculty Senators may request access to the audio recording of the meeting. Please email facsenate@mst.edu with justification.

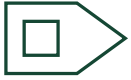


Agenda

I. Call to Order and Roll Call

D. Westenberg for P. Runnion, Secretary

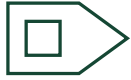
October 19, 2023



Agenda

II. Approval of Minutes

KC Dolan, President
September 21, 2023



Agenda

III. President's Report

KC Dolan

IFC meeting October 2 on Zoom

- > President's report from State of the State Address to Board of Trustees, September 22, 20
- > FY23-24 projects for S&T:
 - > Mining and refining of critical minerals: \$16M
 - > Manufacturing Innovation Center: \$15M
- > S&T ranked 5th in Money Magazine Ranking for "Best Colleges for Engineering Majors"
- > Also discussed student enrollment, FY24-25 higher ed funding, annual open enrollment for employee benefits, US News and World Report rankings

IFC meeting October 2 on Zoom

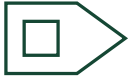
- > Mark Diedrich: Emergency and disaster preparedness
 - Basic Emergency plans, mitigation and recovery, training opportunities
- > Library resources: Looking into library resources, funding issues
 - Open Access Task Force report, ongoing
- > Shared governance report: preparing a white paper, ongoing
- > IT issues, Ben Canlas, interim: Software procurement (ex: Adobe, Overleaf)
 - Hiring a new VP IT/ CIO
- > Next meeting November 8 in Columbia

Campus Matters—Librarians status

- > Librarians move to NTT faculty status
- > Three-step process:
 - They decide if they want to transition—they do
 - Faculty Senate votes
 - Chancellor approves
- > Other schools in system are this way, will help promotions, benefits
- > Goal: to vote in November, when Bella Gerlich will be attending

Campus Matters

- > FS officer duties
- > PDFs prepared and available at FS website
- > <https://facultysenate.mst.edu/fsmembership/>
- > Please share with other senators, departments

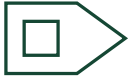


Agenda

IV. Campus Reports

A. Staff Council

J. Sansone – no report



Agenda

IV. Campus Reports

B. Student Council

M. Baur

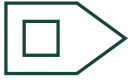
Student Council

Markus Baur- College of Engineering and Computing

Starting on Capital Project

Continuing Tutoring Survey

Space Management – Developing Survey



Agenda

IV. Campus Reports

C. Grad Student Council

H. Al-Abedi



Agenda

V. Special Topic

Kummer Institute Update

S. Roberts



Missouri University of Science and Technology

Kummer Institute for Student Success, Research, and Economic Development

Stephen Roberts

Chief Operations Officer of the Kummer Institute

October 19, 2023

Kummer Institute Primary Objectives

Established by the donors, June and Fred Kummer

- ▶ Elevate Missouri S&T's standing as a world-class technological university
- ▶ Create broad knowledge of, and access to, exceptional STEM educational opportunities through extensive outreach and engagement of K-12 communities
- ▶ Drive economic development regionally, statewide, and beyond

The Asset: a \$311M gift given in October 2020

Now, asset plus leveraged funds is around \$500M.

| | Total | Long Term | Capital |
|--|-----------------------|-----------------------|----------------------|
| Beginning Balance | \$ - | \$ - | \$ - |
| Gift Revenue | \$ 311,676,526 | \$ 203,907,897 | \$ 107,768,629 |
| Market appreciation/depreciation | \$ 60,585,937 | \$ 72,206,041 | \$ (11,620,104) |
| Dividends, Interest, and Capital Gains | \$ 26,248,011 | \$ 22,155,142 | \$ 4,092,869 |
| Withdrawals | \$ (50,162,431) | \$ (19,689,074) | \$ (30,473,357) |
| Advisory Fees | \$ (228,243) | \$ (172,708) | \$ (55,535) |
| | | | |
| Value on Sept 30, 2023 | \$ 348,119,800 | \$ 278,407,298 | \$ 69,712,502 |

Key Investments to Date in Research

Endowed Faculty: Professors, Dept Chairs, and Center Directors

- ▶ **David Bojanic**, Professor of Business and Information Technology
- ▶ **Lijun Jiang**, Professor of Electrical and Computer Engineering
- ▶ **Seung-Jong (Jay) Park**, Chair of Computer Science
- ▶ **Richard Billo**, Advanced Manufacturing Center Director
- ▶ **Don Wunsch**, Artificial Intelligence and Autonomous Systems Center Director
- ▶ **Shelley Minter**, Resource Sustainability Center Director
- ▶ 10 additional endowed faculty over next 5 years

Key Investments to Date in Research, cont.

Graduate student support, faculty grants, and facilities

- ▶ **45 Innovation and Entrepreneurship Doctoral Fellowships**
 - 12-month \$24,000 research assistantship, a \$6,000/yr fellowship, \$1,500/yr in professional development funds, and tuition and fee remittance for 4 years
- ▶ \$1.0M in **Research Ignition Grants** awarded to S&T faculty
- ▶ \$1.2M in **matching funds** to awarded federal grants, plus \$8.1M in matching funds for pending federal grants
- ▶ **Missouri Protoplex**: \$30M of \$105M total project cost
- ▶ **Advancing STEM in Missouri** (ERL renovation and expansion, Schrenk East renovation, and geothermal expansion): \$35M of \$101M total project cost

Key Investments to Date in Student Success

Student scholarships, programs, and facilities

- ▶ **1,000+ Kummer Vanguard Scholars**
 - \$1K to \$3K per year plus professional development programs in entrepreneurship, research, build & design, leadership, and social impact for four years
 - 1st-year retention and 1st-year GPA for Vanguard Scholars are 93% and 3.5, respectively, compared to 81% and 3.1 for students not in the Vanguard program. Positive differentials in these metrics for Pell, URM and first-generations students are even greater.
- ▶ \$270K in **Teaching Ignition Grants** awarded to S&T faculty
- ▶ **Kummer College of Innovation, Entrepreneurship and Economic Development** administrators, faculty, and staff
- ▶ **Innovation Lab**: \$18.9M of \$37.3M total project cost
- ▶ **Welcome Center**: \$12.9M of \$25.8M total project cost

Key Investments to Date in K-12 Outreach

STEM Education Center, student programs, teacher programs


- ▶ **STEM Education Center** staff, facilities, and equipment
 - Hosted over 1,600 K-12 students at Missouri S&T academic **summer camps** in 2022 and 2023.
 - Hosted **workshops and conferences** for 100 K-12 STEM teachers statewide.
 - Hosted several thousand K-12 students at **on-campus events** such as FIRST Robotics competition, Technology Student Association Conference, STEM Day, and May The 4th Be With You.

How can you get involved?

Engage in activities, programs, and opportunities

- ▶ **Help recruit** KI endowed faculty, doctoral fellows, and Vanguard Scholars
- ▶ **Offer your expertise** in programs for Vanguard Scholars and K-12 students and teachers
- ▶ **Write an Ignition Grant** for research innovation or teaching transformation
- ▶ **Write a grant proposal** and ask for matching funds
- ▶ **Develop a new degree program** and ask for supporting funds
- ▶ **Help plan** new facilities
- ▶ **Inspire others** to support student success, research, and economic development

Kummer Campaign | Doubling Up for Student Support



36
Donors

\$395,200 **7 Days**
Donated Remaining

Match Gift! 7 days left!

Give Now!

[Share](#) [Tweet](#) [Share](#)

[Copy to Share](#)

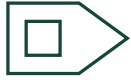
This campaign ends on October 25 at 11:59PM CDT

[About](#) [Updates](#) [Donors](#) [Advocates](#)

<https://go.mst.edu/kummermatch/>

Thank you!

Questions?



Agenda

VI. Reports of Standing Committees

A. Campus Curriculum

P. DeWitt

CCC Meeting - 26 September 2023

Total Committee Activity

- 4 Course Change Requests (CC Forms)
- 10 Program Change Forms (PC Forms)
- 5 Experimental Course Request (EC Form)

CCC Meeting - 26 September 2023

Course Changes (CC) Requested

File: 4982 COMP SCI 6606 : Advances in Cyber-Physical Systems

File: 4761.3 MATH 1211 : Calculus I-B

File: 4999 MS&E 6140 : Communication in Materials Science and Engineering

File: 4992 STAT 5290 : Computational Bayesian Methods using Python

CCC Meeting - 26 September 2023

Program Changes (PC) Requested

- File: 157.41 HIST-BA : History BA
- File: 242.28 HISTORY-BS : Bachelor of Science in History
- File: 170.4 NU ENG-MS : Nuclear Engineering MS
- File: 211.1 NU ENG-PHD : Nuclear Engineering PhD
- File: 401 PROPOSED : Environmental Science and Policy CTU
- File: 403 PROPOSED : Human Factors Psychology CTU
- File: 404 PROPOSED : Industrial/Organizational Psychology CTU
- File: 406 PROPOSED : Neuroscience CTU
- File: 405 PROPOSED : Psychology of Diversity and Inclusion CTU
- File: 400 PROPOSED : Teacher Leadership CT

CCC Meeting - 26 September 2023

For Informational Purposes; No Senate Approval Required

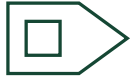
Experimental Course (EC) Requested

- File: 4996 ART 1001.002 : Popular Applied Arts
- File: 4995 ENV SCI 3001.001 : One Health Basics
- File: 4994 MATH 5001.005 : Scientific Programming with Python
- File: 4990 TCH COM 3001.003 : Video Design and Editing
- File: 5000 TCH COM 5001.004 : Advanced Video Design and Editing

CCC Meeting - 26 September 2023

Curriculum committee moves for FS to approve the 4 CC and 10 PC form actions.

Discussion: Questions or comments?



Agenda

VI. Reports of Standing Committees

B. Effective Teaching (CET)

D. Burns

Online education policies

UM Policies for Online Education

- ▶ There is a [UM System-wide requirement](#) that instructors teaching online courses be certified to do so prior to teaching online.
- ▶ All primary instructors who teach an online course (i.e., faculty, adjunct, graduate students) must complete certification prior to teaching (guest lecturers, TAs, graders, class managers/coordinators do not need to be certified)
- ▶ Recertification will occur every 5 years, from the date of the last certification
- ▶ New faculty/instructors will be given a one-semester grace period to become certified or recertified if they are assigned to teach an online class during their first semester as a faculty member/instructor
- ▶ This is important for online program rankings, where having every instructor trained counts for as much as them all having terminal degrees!

Online education policies

Motion 1

- ▶ The Committee for Effective Teaching proposes that all instructors of online courses (including "distance" courses) complete the UM System (Missouri Online) or ACUE Online Teaching Certification by May 1, 2024. If an instructor has been teaching online for three years, that person can do the recertification instead. All new instructors of online courses need to be certified before the course begins, unless it is their first semester teaching at S&T. We strongly recommend providing additional compensation to adjuncts to cover this training.

Online education policies

Motion 2

- ▶ To support continuous improvement in course design and maintain compliance with the UM System (Missouri Online) requirements, the Committee for Effective Teaching proposes that Missouri S&T requires a five-year cycle of Quality Course Review for online courses. This applies only to fully online, asynchronous courses (not “distance” courses). Courses will be reviewed by two Instructional Designers from Missouri Online, who are not involved in the development and teaching of the course they review, but are trained to evaluate courses using the System’s quality standards.

WORKSHOP SESSIONS

Thank you for your interest in the Online Teaching Certification Seminar. Registration for 2023 sessions is now open.

Online teaching certification seminar 2024 - session 1

Feb 05, 2024 - Mar 18, 2024

[Register now →](#)

Online teaching certification seminar 2024 - session 2

Apr 08, 2024 - May 20, 2024

[Register now →](#)

Online teaching certification seminar 2024 - session 3

Jun 03, 2024 - Jul 15, 2024

[Register now →](#)

Online teaching certification seminar 2024 - session 4

Jul 08, 2024 - Aug 19, 2024

[Register now →](#)

Online teaching certification seminar 2024 - session 5

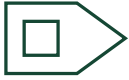
Sep 09, 2024 - Oct 21, 2024

[Register now →](#)

Online teaching certification seminar 2024 - session 6

Oct 07, 2024 - Nov 18, 2024

[Register now →](#)

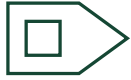


Agenda

VI. Reports of Standing Committees

C. ITCC

P. Koob



Agenda

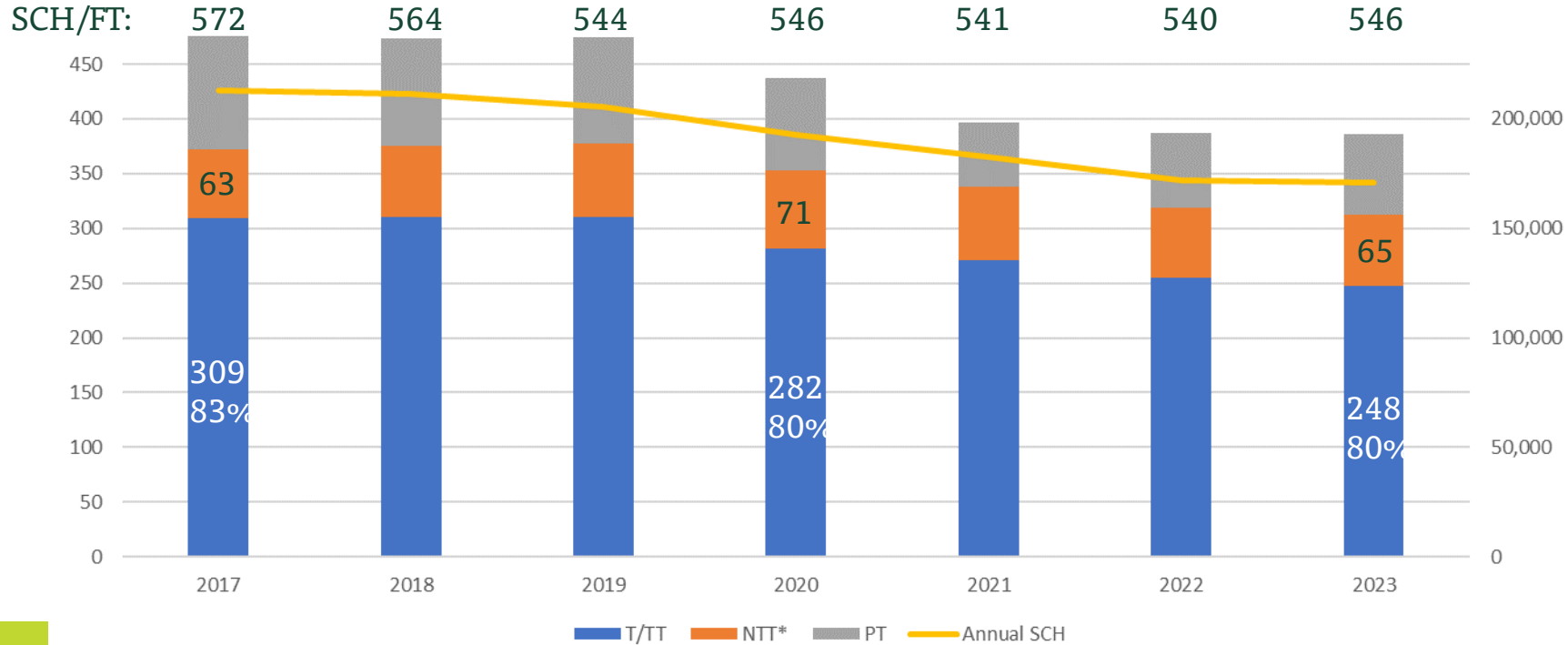
VI. Reports of Standing Committees

D. Budgetary Affairs

M. Fitch

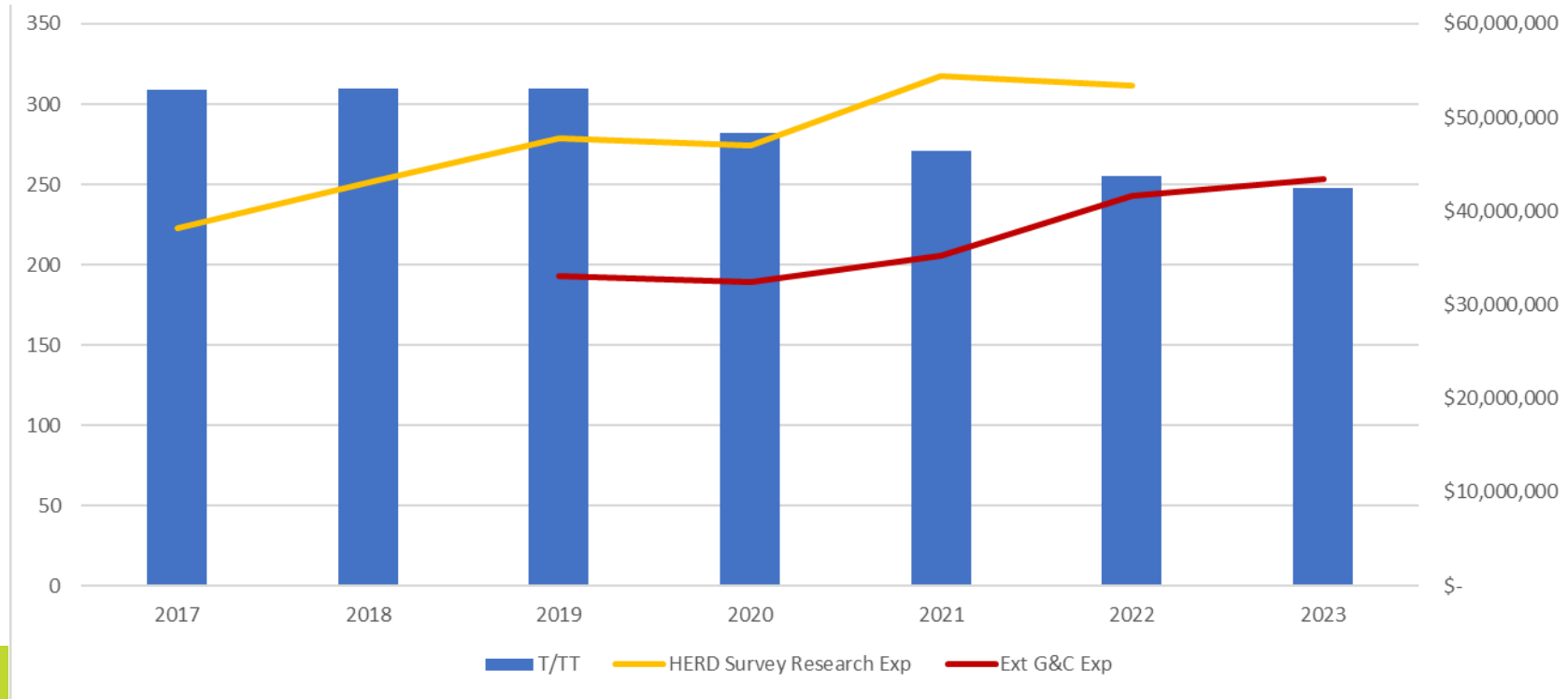
Referral on NTT/TT count

NTT Excludes research professors & post docs (37 → 11)



2017 – 2022 research funding

54 fewer professors, 18% decline, \$15 million increase (40%)



FY2024 - Operating Revenues

Operating Funds (in millions)

| Operating Revenues | FY2022 | FY2023 | FY2024 | |
|------------------------------------|--------------|--------------|--------------|--|
| Tuition and Fees | 119.3 | 125.3 | 130.7 | Nonresident enrollment up |
| Less Scholarship Allowances | 38.7 | 43.6 | 45.5 | Internal discount up as \$, similar % |
| Net Tuition and Fees | 80.6 | 81.7 | 85.2 | |
| <i>Institutional Discount Rate</i> | 32.4% | 34.8% | 34.8% | |
| Auxiliary Enterprises | 1.2 | 1.4 | 1.1 | Student Affairs (dorms + food), mostly |
| Other Operating Revenues | 10.5 | 12.5 | 10.7 | Mostly research indirect |
| State Appropriations | 53.0 | 55.9 | 60.1 | State up a bit |
| Private Gifts | 0.4 | 0.5 | 0.1 | |
| Spendable Investment Income | 3.4 | 3.6 | 3.7 | (KF money isn't operating \$) |
| Total Operating Revenues | 149.0 | 155.5 | 161.0 | +5.5 million, 3.5% |

FY2024 - Operating Expenses


Operating Funds (in millions)

| Operating Expenses | FY2022 | FY2023 | FY2024 | |
|--|--------------|--------------|--------------|---|
| Compensation | | | | |
| Salaries and Wages | 73.0 | 77.8 | 130.7 | 6.2% increase |
| Benefits | 23.5 | 24.8 | 29.3 | 17.8% increase |
| Total Compensation | 96.5 | 102.7 | 11.9 | 9.0% increase |
| Supplies, Services and Other Operating Expenses | 29.1 | 24.8 | 29.3 | Student Affairs (dorms + food), mostly |
| Total Operating Expenses | 125.6 | 155.5 | 161.0 | |
| Net Operating Income | 23.4 | 21.0 | 17.5 | All funds aim for 2% margin; operating funds going to capital expenses: |
| Capital Expense | 6.4 | 8.9 | 10.1 | Geothermal plant |

FY2024 - Operating Expenses

Operating Funds (in millions)

| Operating Expenses | FY2022 | FY2023 | FY2024 | |
|--|--------------|--------------|--------------|--|
| Compensation | | | | |
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| Total Operating Expenses | 125.6 | 155.5 | 161.0 | |
| Net Operating Income | 23.4 | 21.0 | 17.5 | High margin? All funds aim for 2% |
| Capital Expense | 6.4 | 8.9 | 10.1 | |


 operating funds going to capital expenses, next slides

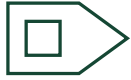
Reminder on building costs (from Sept 2022)

| Item | Total | Kummer Institute | Gifts | State | Internal |
|----------------------------------|-------|------------------|-------|-------|----------|
| Arrival court | 9.60 | 0.47 | 9.13 | - | - |
| Site development and relocations | 4.66 | - | 4.37 | - | 0.29 |
| Power plant demo | 3.77 | - | - | 3.77 | - |
| Underground Parking Garage | 10.23 | 9.23 | 1.00 | - | - |
| Hwy 63 pedestrian underpass | 4.10 | - | - | - | 4.10 |
| Innovation Lab | 37.72 | 20.66 | 7.50 | - | 6.51 |

Reminder on building costs (from Sept 2022)

| Item | Total | Kummer Institute | Gifts | State | Internal |
|---------------------------------|-------|------------------|-------|-------|----------|
| Protoplex | 96.25 | 50.00 | - | 46.25 | - |
| Rolla Building | 1.95 | - | - | - | 1.95 |
| Substation Relocation | 11.15 | - | - | 0.91 | 10.24 |
| University Drive/ Roundabout | 4.28 | - | - | - | 4.28 |
| Welcome Center | 25.75 | 12.88 | - | - | 12.88 |

\$41,733,322

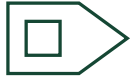


Agenda

VI. Reports of Standing Committees

E. Personnel

D. Westenber



Agenda

- **Changes to NTT Promotion Policy**
- **Qualitative Results of Annual Survey**

NTT Policy Revision Goals

- Include Deans in the process
- Include Kummer College in the process
- Align process with Tenure and Promotion Process
- Revise Review Committee Composition

NTT Policy Revision Changes

- Deans input between Department Chair and Review Comm
- Chair of Kummer College T&P Committee added to the Review Comm.
- Chair of the Review Committee will be elected from the three college T&P Committee Chairs
- Defined timeframe for rebuttal to be 14 days as with T&P
- Timeline is to be established in Spring prior to the next cycle (currently in Fall semester at the beginning of the cycle)

NTT Policy Sticking Points

- Composition of the Review Committee
 - Currently college T&P chairs, 3 NTT Teaching and 3 NTT Research
 - Candidate's Department T&P Chair is non-voting member
 - Do we need separate Teaching and Research Committee?
 - What to do if not enough eligible NTT – Curators' Professors
 - Should Candidate have a representative? Representative should be non-voting and NOT an “advocate” role.



Missouri University of Science and Technology

Updated (Qualitative) Findings

Faculty-Staff Climate Survey, 2023

September-October, 2023

Open-Ended Questions

Support Action codes – Actions S&T has taken to support employees, their work, and/or their careers

- ▶ “List 3-5 actions Missouri S&T has taken to support you, your work, and your career.”

Wish Action codes – Actions employees wish S&T would take (or would have taken) to support them, their work, and/or their careers

- ▶ “List 3-5 actions you wish Missouri S&T would take to support you, your work, and your career.

Summary of Total Responses

627 total support code responses (39% of total comments – up from 30% in 2022), 984 total wish code responses (61% of total comments, down from 70% in 2022)

- ▶ 357 more wish code responses than support code responses

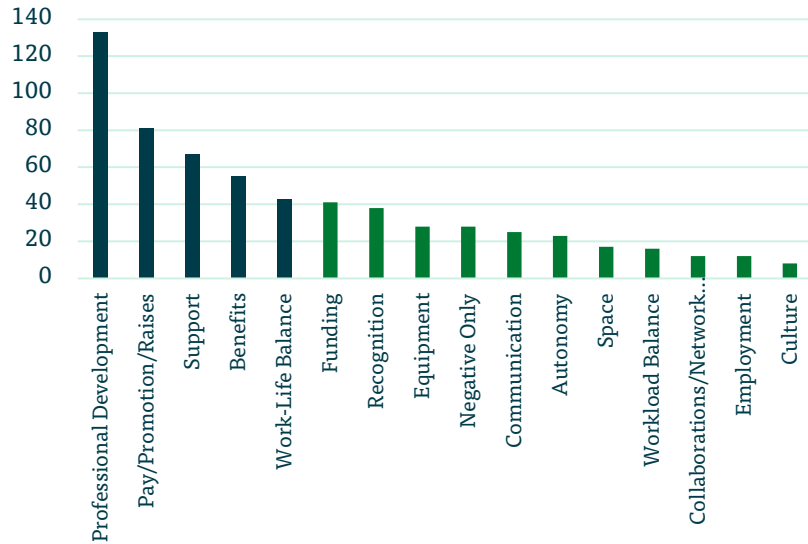
Of the 627 support code responses:

- ▶ 28 were negative-only (4.4% of responses, down from 8.4% in 2022)
- ▶ Another 16 were sarcastic or conditional (2.6% of responses, down from 8.9% in 2022)

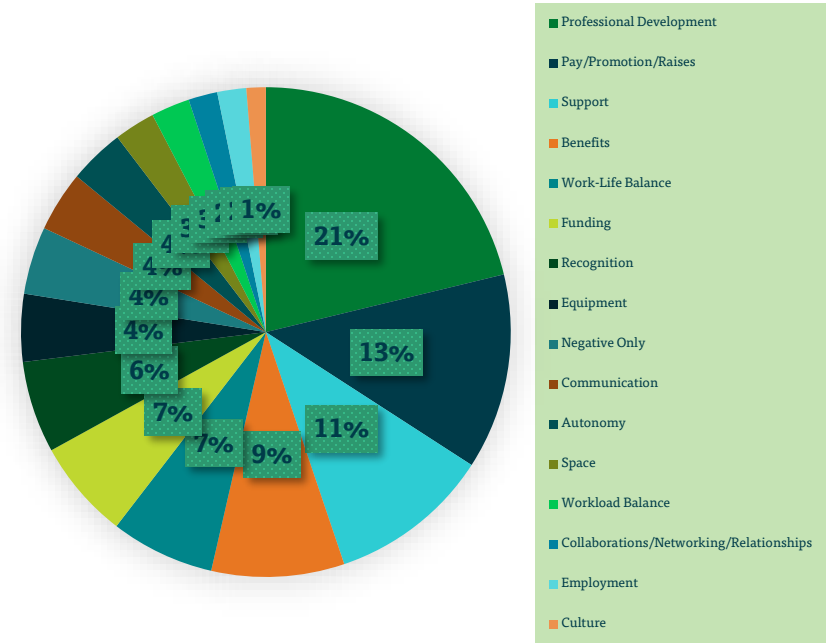
S&T Support Actions

2023 Data

Support Action Frequencies



Support Action Percents

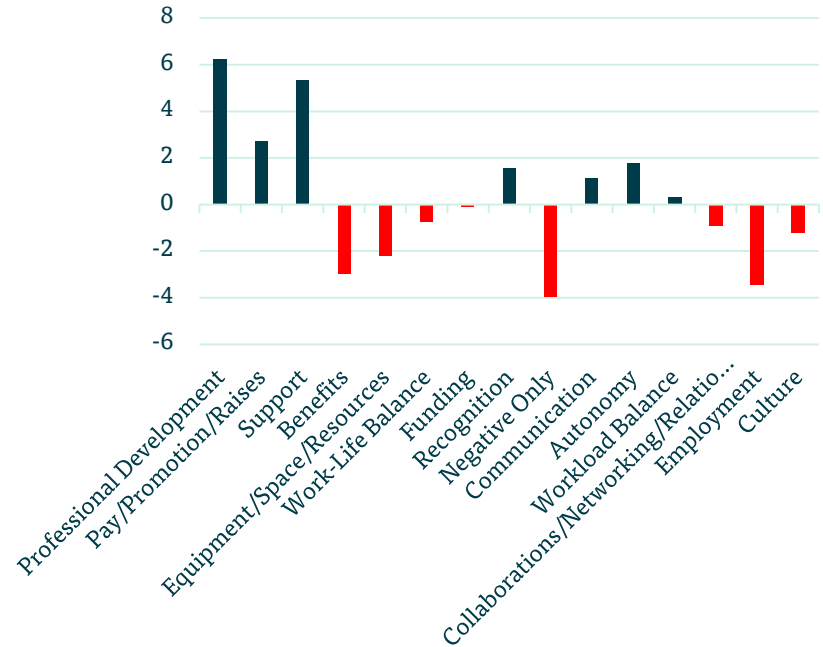


S&T Support Actions

Compare 2022 vs. 2023

| 2022 Top 5 | 2023 Top 5 |
|--------------------------|--------------------------|
| Professional Development | Professional Development |
| Benefits | Pay/Promotion/Raises |
| Pay/Promotion/Raises | Support |
| Resources | Benefits |
| “Nothing” | Work-Life Balance |

Percent Change in Support Codes 2022-2023



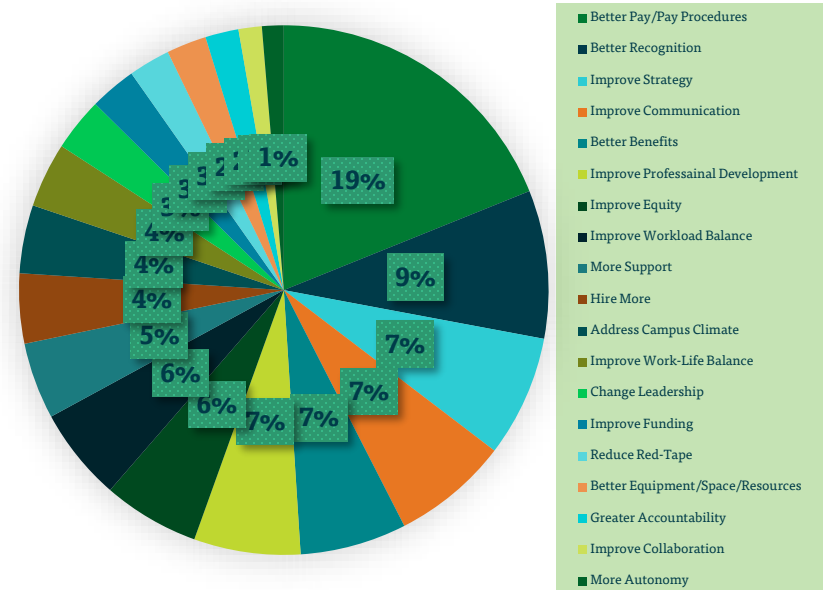
S&T Wish Actions

2023 Data – Individual Codes

Wish Action Frequencies



Wish Action Percents

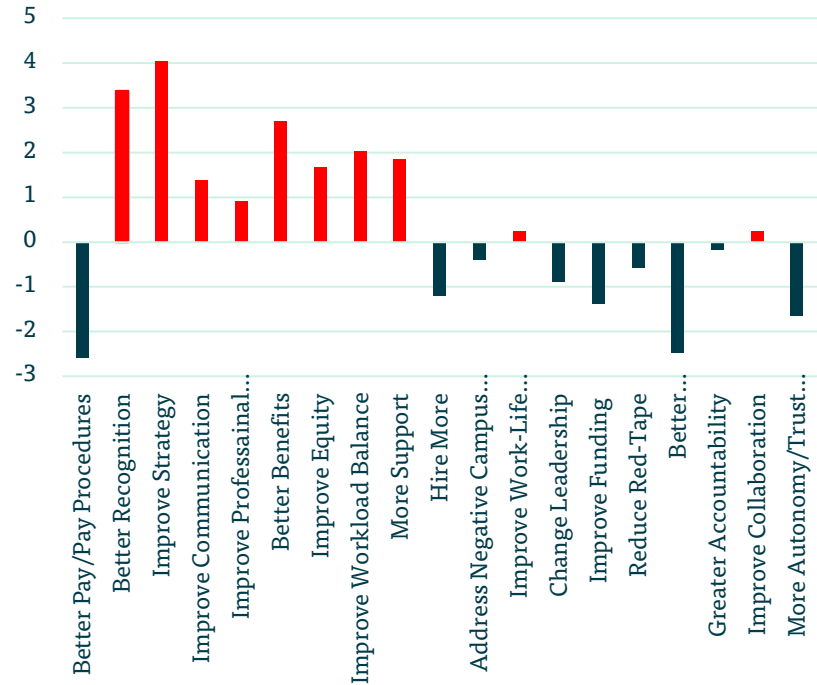


S&T Wish Actions

Compare 2022-2023 Individual Codes

| 2022 Top "5" | 2023 Top "5" |
|----------------------------------|----------------------------------|
| Better Pay/Pay Procedures | Better Pay/Pay Procedures |
| Improve Communication | Better Recognition |
| Better Recognition | Improve Strategy |
| Improve Professional Development | Improve Communication |
| Hire More | Improve Professional Development |
| Better Equipment/Space/Resources | Better Benefits |

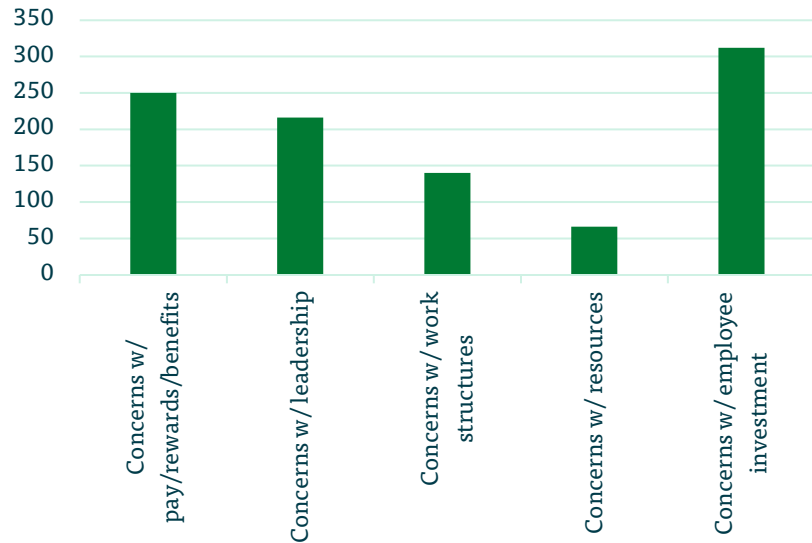
Percent Change in Wish Codes 2022-2023



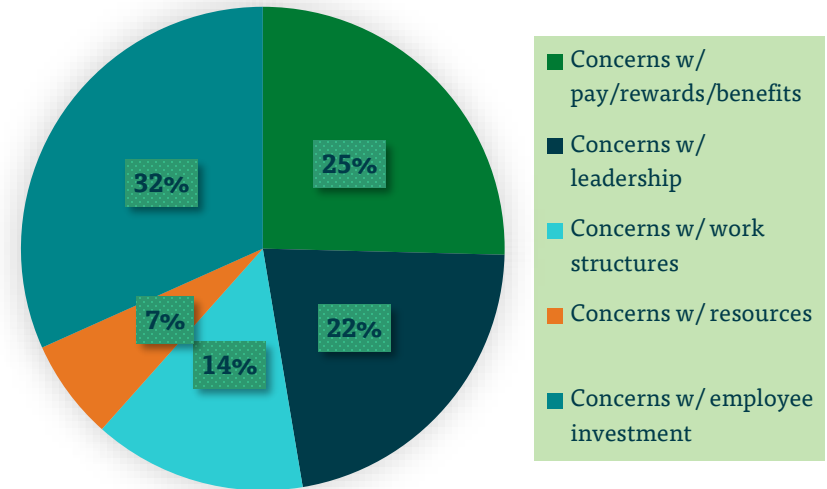
S&T Wish Actions

2023 Data Broad Categories

Broad Category Frequencies



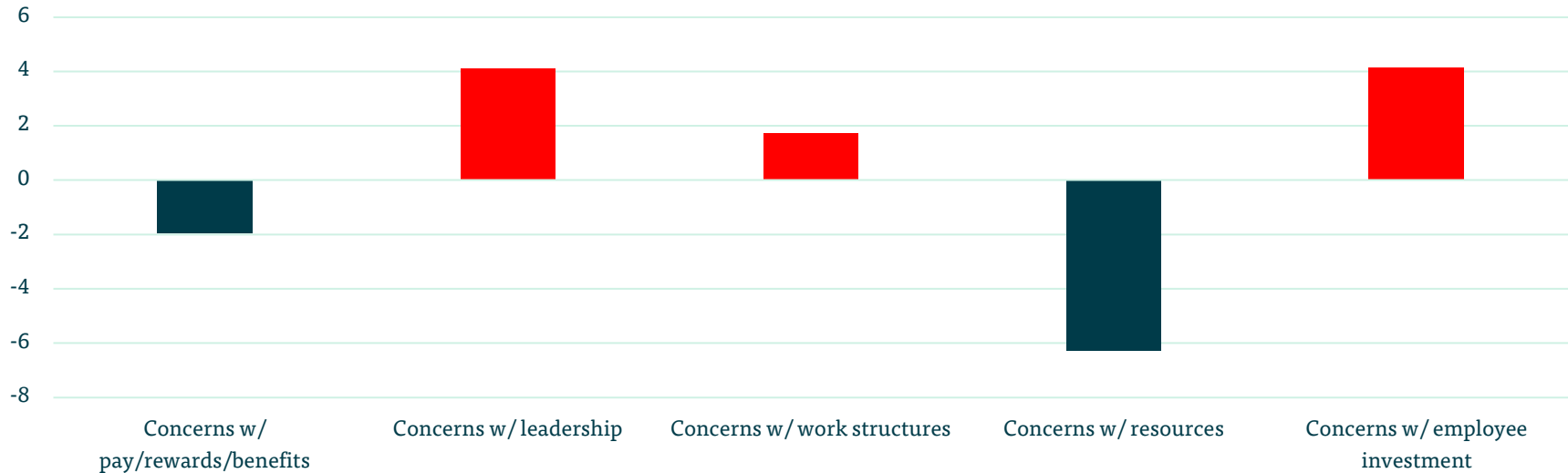
Broad Category Percents



S&T Wish Actions

Compare 2022-2023 Broad Categories

Percent Change in Broad Categories 2022-2023



Stay Tuned

COACHE Survey Open Forum coming

November 1

3 pm to 5 pm



Agenda

VI. Reports of Standing Committees

F. Public Occasions

S. Sedigh Sarvestani

Motion 1

Approval of Academic Calendar for AY 2026 - 2027

The Public Occasions Committee moves that the following calendar be adopted for the 2026-2027 academic year

Motion 1: Academic Calendar for AY 2026 - 2027

Fall Semester 2026

Open registration ends
Fall semester opens 8 am
Classwork begins 8 am
Labor Day Holiday
Fall Break begins 8 am
Fall Break ends 8 am
Mid-Semester
Thanksgiving vacation begins 8 am
Thanksgiving vacation ends 8 am
Last class day
Final examinations begin 7:30 am
Final examinations end 5 pm
Fall Semester closes 6 pm
Commencement - 6 pm - PhDs in all departments
Commencement- 10 am- Grad and undergrad degrees in designated departments
Commencement – 3 pm grad and undergrad degrees in designated departments

August 23, Sunday
August 24, Monday
August 24, Monday
September 7, Monday
October 8, Thursday
October 12, Monday
October 17, Saturday
November 22, Sunday
November 30, Monday
December 11, Friday
December 14, Monday
December 18, Friday
December 18, Friday
December 18, Friday
December 19, Saturday
December 19, Saturday

Motion 1: Academic Calendar for AY 2026 - 2027

Spring Semester 2027

| | |
|---|---------------------|
| Open registration ends | January 18, Monday |
| Martin Luther King, Jr. Recognition Holiday | January 18, Monday |
| Spring semester opens 8 am | January 19, Tuesday |
| Classwork begins 8 am | January 19, Tuesday |
| Spring Recess begins 8 am | March 11, Thursday |
| Mid-Semester | March 13, Saturday |
| Spring Recess ends 8 am | March 15, Monday |
| Spring Break begins 8 am | March 28, Sunday |
| Spring Break ends 8 am | April 5, Monday |
| Last class day | May 7, Friday |
| Final examinations begin 7:30 am | May 10, Monday |
| Final examinations end 5 pm | May 14, Friday |
| Spring Semester closes 6 pm | May 14, Friday |
| Commencement – 6 pm PhDs in all departments | May 14, Friday |
| Commencement - 10 am Grad and undergrad degrees in designated departments | May 15, Saturday |
| Commencement – 3 pm Grad and undergrad degrees in designated departments | May 15, Saturday |

Motion 1: Academic Calendar for AY 2026 - 2027

Summer Session 2027

Open registration ends

May 30, Sunday

Summer session opens 8 am

May 31, Monday

Classwork begins 8 am

May 31, Monday

Juneteenth Holiday (observed)

June 18, Friday

Independence Day Holiday (observed)

July 5, Monday

Final examinations begin 8 am

July 22, Thursday

Final examinations end 12:30 pm

July 23, Friday

Summer Sessions close 12:30 pm

July 23, Friday

Schedule shows the regular eight-week Summer Session. Other special four-week course sessions may be scheduled.

Motion 1: Academic Calendar for AY 2026 - 2027

Class Sessions (excluding final examinations)

| | M | TU | W | R | F | Total MWF | Total TR |
|--------|----|----|----|----|----|-----------|----------|
| Fall | 14 | 15 | 15 | 14 | 14 | 43 | 29 |
| Spring | 14 | 15 | 15 | 14 | 14 | 43 | 29 |
| Summer | 7 | 8 | 8 | 8 | 7 | 22 | 16 |

Motion 2

Change to Fall Break for 2024

The Public Occasions Committee moves that the Fall Break for 2024 be postponed by one week

Current dates: October 3, 2024 through October 6, 2024

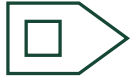
Proposed dates: October 10, 2024 through October 13, 2024

Justification: Current dates coincide with athletic events



Agenda

VII. Unfinished Business



Agenda

VIII. New Business



Agenda

IX. Adjourn