

Rules, Procedures and Agenda (RP&A) Committee Meeting Minutes Tuesday, January 15, 2019

1. Call to order

The meeting was called to order at 5:04 pm.

Mike Bruening, Steve Corns, Steve Raper, Mark Fitch, David Westenberg, Jonathan Kimball, and Sahra Sedigh Sarvestani were present.

2. Approval of minutes

- a. November 6, 2018 meeting approved without revision.
- 3. Reports from special/ad hoc committees
 - a. Ad Hoc Special Committee for Department Creation/Realignment

Dr. Raper, chair, reported that the first draft of a procedure is nearly complete. The committee plans to make a motion at the February Faculty Senate meeting, assuming that the final draft of the procedure is ready at least a week in advance.

b. Bylaws Revision Committee

Dr. Bruening reported that Dr. Schuman, chair, has assigned revision of specific sections to each member of the committee.

c. Graduate Student Tuition Waivers/Policy II-26 Committee

Dr. Dawes, chair, reported that the committee has met several times. They are in the process of negotiating (with the Office of the Vice Chancellor for Research and Dean of Graduate Studies) a compromise on how to budget graduate student tuition in grants, while making every effort to ensure that PhD students (or MS students, in departments that do not grant PhDs) do not pay tuition out of pocket. Suspension of II-26 has been extended to January 31, 2019.

- 4. Reports on pending referrals to standing committees
 - a. Student Affairs: Disability support policies and practices

Dr. Acar, chair, was not present. Dr. Raper reported that a related committee has been created by the Office of the Vice Chancellor for Finance and Operations. Issues to be examined by the new committee include disability accommodations extended



to students. He will inform Dr. Acar of this development and will suggest that the two committees collaborate. Dr. Sedigh Sarvestani will remind Dr. Acar to send an updated request to Mr. Mark Davis, Director of Testing & Student Disability Services.

b. Academic Freedom and Standards:

- i. Plus/minus grading
- ii. Removing transfer credit from the calculation of cumulative GPA

Dr. Kosbar, chair, sent a report by email, including slides to be presented at the January Faculty Senate meeting. The committee will report on the potential change to plus/minus grading in January, but the motion will be made at the February meeting. In discussion of the draft motion in Dr. Kosbar's RP&A report, it was suggested that instead of equating a C- to a C for the purpose of satisfying prerequisites, the course catalog specify a blanket change. Concerns were again expressed about the effect of plus/minus grading on athletics, qualification for scholarships, and other recognition.

Dr. Kosbar has also reported that the committee plans to begin work on the second referral in the near future. Rather than focusing on GPA calculations, he plans to ask the committee to review the topic of transfer credit in general. He has contacted the Registrar to ask for guidance and data.

c. Public Occasions: Addition of a fall break

Dr. Sedigh Sarvestani, chair, reported that input has been solicited (through Faculty Senators) from academic departments, but has so far received information from only three departments. If sufficient input has been received by January 15, the committee will report at the January Faculty Senate meeting.

The Office of Admissions has requested approval of proposed Open House dates for AY 2019-2020. The committee will be making a related motion at the January Faculty Senate meeting.

Dr. Raper mentioned on behalf of the Commencement subcommittee that beginning in May 2019, three ceremonies will be held instead of two.

d. Personnel: Review of promotion policy for non-tenure track faculty

Dr. Westenberg, chair, reported that the committee's motion was approved by Faculty Senate in November. This completes the referral.

e. Committee for Effective Teaching: Review of IFC document on teaching evaluation

No report.

f. Intellectual Property: Review of new invention assignment agreement

Dr. Jonathan Kimball, chair, distributed minutes of the committee's December meeting, as well as text of the motion to be made by the committee at the January meeting of Faculty Senate.

g. Administrative Review: Progress of this year's surveys

No report.

- h. Budgetary Affairs: Several open referrals
 - i. Investigate amounts and trends of recent raises given to administrators
 - ii. Investigate costs to-date, and projected of graduate tuition remittance.

Dr. Mark Fitch, chair, reported that the committee plans to report on the first referral in January. He asked for guidance from RP&A on how to define an "administrator" in this context. The committee was advised to consider associate deans and above as administrators for the purpose of compiling data on raises.

The II-26 committee is investigating the second referral. They plan to share the numbers with the Budgetary Affairs committee.

i. Curricula: Developing a process for approval of undergraduate certificates

Dr. Steve Raper, chair, reported that the committee will present the Faculty Senate with a motion at the January meeting and shared the gist of the motion.

- j. Information Technology and Computing:
 - i. Investigate policy and practices associated with IT access of information on and potentially "bricking" employee-owned mobile devices.
 - ii. Examine the campus monitoring policy.
 - iii. Investigate remote control of conference room workstations by the Video Communications Center, and discuss related privacy concerns

No report.

5. Preparation of agenda for January 24, 2019 Faculty Senate meeting

The agenda for the meeting was prepared and approved.



6. Unfinished business

No unfinished business.

7. New business

No new business.

8. Adjourn

The meeting adjourned at 6:28 pm.

Sedighsarvestani, Sahra

From: Kosbar, Kurt Louis

Sent: Tuesday, January 15, 2019 10:56 AM

To: Sedighsarvestani, Sahra; Bruening, Michael; Corns, Steven; Raper, Stephen A.; Dawes,

Richard; Kessinger, Kaeden M. (S&T-Student); Fitch, Mark W.; Zawodniok, Maciej Jan; Westenberg, David J.; Stone, Nancy J.; Ferguson, Ian; Huebner, Wayne; Ludlow, Douglas

K.; Kimball, Jonathan W.; Fan, Jun; Acar, Levent; Ali, Danish (S&T-Student)

Subject: RP&A: Status report from Academic Freedom and Standards Committee, on +/- grade

issue

Attachments: AFS_Jan_FS_Report.pptx

RP&A,

Please find attached a status report from the Academic Freedom and Standards Committee, regarding the referral we received last September on the +/- grading issue.

The presentation includes a motion the AF&S committee has voted to make at a Faculty Senate meeting. As I expect this will be a contentious issue, and not time critical, I prefer to delay putting the motion on the floor until the February meeting.

If time permits, I would like a chance to address the Senate next week, to summarize the report, answer questions, and collect comments.

I don't know if I will be able to make the RP&A meeting today, as I have another obligation at that time. You are welcome to distribute the attached presentation with the Faculty Senate agenda, if you wish.

Kurt Kosbar

Chair, 2018-19 Academic Freedom and Standards Committee

Academic Freedom & Standards Committee

Status Report on +/- Grading Issue

24 January 2019 K. Kosbar, Chair 2018-19 AF&S Committee



History

- > Spring 2018
 - Two referrals sent to AF&S
 - > Consider +/- grading system
 - $\,>\,$ Consider removing transfer courses from cumulative GPA
- > Summer 2018
 - AF&S makes motion at Faculty Senate to implement +/- grades
 - Faculty Senate does not vote on motion
 - Faculty Senate sends referral to Student Affairs Committee
- > Fall 2018
 - Faculty Senate sends referral back to AF&S
 - > Solicit more comments
 - > Remove dependence on Mizzou policy
- > February 2019
 - AF&S plans to make revised motion at Faculty Senate



Data and Comments Collected From

- > Approximately 160 universities and colleges
- > Student Affairs Committee
- > Student Council
- > Council of Graduate Students
- > Registrar
- > Athletics
- > Freshman Engineering



Other Universities and Colleges

- > Surveyed grading policies from following institutions
 - Top 100 national universities (as defined by US News & World Report)
 - Top 100 engineering (doctorate) universities (USN&WR)
 - Top 10 engineering (non-doctorate) universities (USN&WR)
 - Mizzou, UMSL, UMKC, Wash U., SLU
 - Missouri State Universities
 - Missouri community colleges
- > Data on Following Pages
 - Top 100 national + top 100 engineering (doctorate), sorted by national ranking. 5 pages
 - Top 100 of previous list, sorted by engineering ranking MISSOURI pages
 - Top 10 engineering (non-doctorate). ½ page
 - Missouri schools. 1 ½ pages

Rank			1				Repo	114						11-		4-1
		Top 100 National U	Iniversi	ties	+ 10	op 1	00	Und	ergr	ad E	ngii	neer	ing	(dod	tora	ite)
National	Engr	School	A+	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F	Comments
1	12	Princeton U.	4.0	*	*	*	*	*	*	*	*		*		*	
2	24	Harvard U.		*	*	*	*	*	*	*	*	*	*	*	*	
3	1	MIT	5.0	*	х	х	*	х	х	*	х		*	П	*	A=5.0, +/- Internal only
3	18	Columbia U.	4.3	*	*	*	*	*	*	*	*		*		*	
3	32	Yale U.		*	*	*	*	*	*	*	*	*	*	*	*	
3		U. of Chicago	4.0	*	*	*	*	*	*	*	*	*	*		*	
7	2	Stanford U.	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
8	18	Duke U.	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
8	24	U. of Pennsylvania	4.0	*	*	*	*	*	*	*	*	*	*		*	
10	14	Johns Hopkins U.	4.0	*	*	*	*	*	*	*	*	*	*		*	
10	14	Northwestern U.		*	*	*	*	*	*	*	*		*		*	
12	4	California Institute of Technology	4.3	*	*	*	*	*	*	*	*	*	*		*	
12	48	Dartmouth College		*	*	*	*	*	*	*	*		*		*	Posts median grades
14	38	Brown U.		*	П		*	Г		*						
14	38	Vanderbilt U.	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
16	9	Cornell U.	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
16	18	Rice U.	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
18	43	U. of Notre Dame		*	*	*	*	*	*	*	*		*		*	
19	18	UC-LA	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
19	38	Washington U.		*	*	*	*	*	*	*	*	*	*	*	*	
21		Emory U.		*	*	*	*	*	*	*	*	*	*		*	
22	3	UC - Berkeley	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
22	24	U. of Southern California		*	*	*	*	*	*	*	*	*	*	*	*	
22		Georgetown U.		*	*	*	*	*	*	*	*	*	*		*	
25	6	Carnegie Mellon U.		*			*			*			*		*	Grad use +/-
25	38	U of VA		*	х	х	*	х	х	*	х	х	*	x	*	+/- not used in GPA
27	6	U of Mich - Ann Arbor	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
27	59	Tufts U.		*	*	*	*	*	*	*	*	*	*	*	*	
27		Wake Forest U.		*	*	*	*	*	*	*	*	*	*	*	*	

		Top 100 Nationa	US New				•						ing	(do	tor	ata)
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lational	Engr	School	A+	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F	Comments
30	59	U of NC - Chapel Hill		*	*	*	*	*	*	*	*	*	*		*	
30	67	NYU		*	*	*	*	*	*	*	*	*	*		*	
33	43	UC-Irvine	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
33	80	U of Rochester		*	*	*	*	*	*	*	*	*	*	*	*	
35	5	GA Inst. Of Tech		*	П		*			*			*		*	
35	32	U of FL		*	*	*	*	*	*	*	*	*	*	*	*	
35		Brandeis U	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
38	32	UC - Davis	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
38		Boston College		*	*	*	*	*	*	*	*	*	*	*	*	
38		Coll. Of William and Mary		*	*	*	*	*	*	*	*	*	*	*	*	
41	18	UC-SD	4.0	*	*	*	*	*	*	*	*		*		*	
42	43	Case Western Reserve	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
42	48	Boston U		*	*	*	*	*	*	*	*		*		*	
44	48	Northeastern U.		*	*	*	*	*	*	*	*	*	*	*	*	
44	104	Tulane		*	*	*	*	*	*	*	*	*	*	*	*	
46	6	UIUC	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
46	116	U of GA		*	*	*	*	*	*	*	*		*		*	
46		Pepperdine U.		*	*	*	*	*	*	*	*	*	*	*	*	
49	9	UT- Austin		*	*	*	*	*	*	*	*	*	*	*	*	
49	14	UW-Madison		*	X	x	*	х	х	*			*		*	Uses AB style grades
49	30	RPI		*	*	*	*	*	*	*	*	*	*		*	
49	104	Villanova U.		*	*	*	*	*	*	*	*	*	*	*	*	
53	48	Lehigh U.		*	*	*	*	*	*	*	*	*	*	*	*	
53	80	Syracuse U.		*	*	*	*	*	*	*	*	*	*	*	*	
53	104	U of Miami		*	*	*	*	*	*	*	*	*	*		*	
56	9	Purdue U - W. Lafayette	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
56	30	Ohio State U - Columbus		*	*	*	*	*	*	*	*	*	*		*	
56	48	Rutgers U - New Brunswick		*	х	х	*	х	х	*			*		*	Uses AB style grades
59	18	U of Wash		*	*	*	*	*	*	*	*	*	*	*	*	
59	24	Pen State U U Park		*	*	*	*	*	*	*			*		*	

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Ran National	_	School	A+	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F	Comments
59		Woster Polytech Inst	AT	*	Α-	DŦ	*	D-	CŦ	*	C-	υ÷	U	U-	г	comments
59		So Methodist U.		*	*	*	*	*	*	*	*	*	*	*	*	
63		U MD - College Park	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
63		U Conn	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
63		George Washington U		*	*	*	*	*	*	*	*	*	*	*	*	
66		Tex A&M - College Station		*	x	x	*	×	x	*			*		*	Uses AB style grades
66		Clemson U		*	-	X	*	^		*	_	-	*	_	*	Oses Ab style grades
66	87	BYU - Provo		*	*	*	*	*	*	*	*	*	*	*	*	
66	- 07	Clark U	4.3	*	*	*	*	*	*	*	*	*	*		*	
70	48	U of Pitt	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
70		U Mass - Amherst	4.0	*	*	*	*	*	*	*	*	*	*		*	
70		Stevens Inst Tech		*	*	*	*	*	*	*	*	*	*		*	
70		UC-SC	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
70	104	FL State	410	*	*	*	*	*	*	*	*	*	*	*	*	
70		Fordham		*	*	*	*	*	*	*	*		*		*	
76	13	VA Tech		*	*	*	*	*	*	*	*	*	*	*	*	
76		U of MN - Twin Cities		*	*	*	*	*	*	*	*	*	*		*	
78	106	Baylor U.		*	*	*	*	*	*	*	*	*	*	*	*	
78		American U		*	*	*	*	*	*	*	*		*		*	
80	32	NC State U - Raleigh	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
80	43	CO Sch of Mines		*	*	*	*	*	*	*	*	*	*	*	*	
80	106	Binghamton U - SUNY		*	*	*	*	*	*	*	*		*		*	
80		TX Christian U		*	*	*	*	*	*	*	*	П			*	
80		Yeshiva		*	*	*	*	*	*	*	*	*	*	*	*	
85	48	Mich State		*	х	x	*	х	x	*	x	х	*		*	Uses AB style grades
85	67	Stony Brook U - SUNY		*	*	*	*	*	*	*	*	*	*		*	
85	87	UC - Riverside	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
85		U of San Diego		*	*	*	*	*	*	*	*	*	*	*	*	
89	55	U of Delaware		*	*	*	*	*	*	*	*	*	*	*	*	
89	67	U at Baffalo - SUNY		*	*	*	*	*	*	*	*	*	*		*	

		Top 100 Natio	US New nal Universi										ing	(doc	tora	te)
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National		School	A+	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F	Comments
89	75	U of Iowa	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
89	132	Howard U		*			*			*			*		*	
89	132	Marquette U.		*	*	*	*	*	*	*	*	*	*		*	
89		Indiana U - Bloomington	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
89		Loyola U - Chicago		*	*	*	*	*	*	*	*	*	*		*	
96	32	UC Bolder		*	*	*	*	*	*	*	*	*	*	*	*	
96	75	ILL Inst of Tech		*			*			*					*	Transfer grades not used in GPA
96	132	U of VT	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
96		Miami U - Oxford	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
96		U of Denver		*	*	*	*	*	*	*	*	*	*	*	*	
96		U of San Fran	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
102	55	Drexel U	4.0	*	*	*	*	*	*	*	*	*	*		*	
102	59	Rochester Inst Tech		*	*	*	*	*	*	*	*		*		*	
102	87	Clarkson U		*	х	х	*	х	x	*	x	х	*		*	Uses AB style grades
102		U of Oregon	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
106	55	U of AZ		*			*			*			*		*	
106	87	NJ Inst of Tech		*	х	х	*	х	x	*			*		*	Uses AB style grades
106	104	U of South Carolina		*	х	х	*	х	x	*	х	х	*		*	Uses AB style grades
115	38	AZ State U - Tempe	4.3	*	*	*	*	*	*	*			*		*	
115	59	Auburn U		*			*			*			*		*	
115	59	U of Tenn		*	*	*	*	*	*	*	*	*	*	*	*	
119	43	Iowa State U.		*	*	*	*	*	*	*	*	*	*	*	*	
119	59	U of UT		*	*	*	*	*	*	*	*	*	*	*	*	
124	87	U of OK		*			*			*			*		*	
124	104	U of South FL	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
129	75	U of III - Chicago		*			*			*			*		*	
129	80	U of Kansas		*			*			*			*		*	
129	80	U of NB - Lincoln	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
129	80	UT - Dallas	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
129	87	U of Alabama	4.3	*	*	*	*	*	*	*	*	*	*	*	*	

Ran National		School	A+	Δ	A-	B+	В	R-	C+	С	C-	D+	D	D-	E	Comments
129		U of MO - Columbia	4.0	*	*	*	*	*	*	*	*	*	*	*	*	comments
136		Mich Tech U	4.0	*	х	х	*	x	х	*	х	х	*		*	Uses AB style grade, uses F*
136		George Mason U	4.0	*	*	*	*	*	*	*	*		*		*	and the state of t
140		CO State U	4.0	*	*	*	*	*	*	*			*		*	
140	67	Oregon State U		*	*	*	*	*	*	*	*	*	*	*	*	
140		Washington State U		*	*	*	*	*	*	*	*	*	*		*	
140		LA State U - Baton Rouge	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
147		Kansas State U		*	П		*			*			*		*	
147	87	U of Cincinnati		*	*	*	*	*	*	*	*	*	*	*	*	
147	87	U of KY		*	г		*		П	*			*		*	
152	87	U of AR		*	Г		*			*			*		*	
157	67	MS&T		*	Г		*			*			*		*	
157	87	OK State U		*	Г		*			*			*		*	Uses F!
165	80	U of Central FL		*	*	*	*	*	*	*	*	*	*	*	*	
165	87	U of MD - Baltimore County		*	х	х	*	х	х	*	х	х	*	х	*	Grad use +/-
171	87	U of Houston		*	*	*	*	*	*	*	*	*	*	*	*	
177	104	MS State U		*	Г		*			*			*		*	
187	87	Texas Tech U		*	х	x	*	х	х	*	х	х	*		*	Uses AB style grades
187	87	U of NM		*	*	*	*	*	*	*	*	*	*	*	*	
194	87	U of NC - Charlotte		*	Г		*		П	*	П		*		*	
	104	CUNY - City College	4.0	*	*	*	*	*	*	*	*		*		*	

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National		School	A+	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F	Comments
3	1	MIT	5.0		x	x		x	x		x		*	_	*	A=5.0, +/- Internal only
7	2	Stanford U.	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
22	3	UC - Berkeley	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
12	4	California Institute of Technology	4.3	*	*	*	*		*	*	*	*	*		*	
35	5	GA Inst. Of Tech		*									*		*	
25	6	Carnegie Mellon U.		*			*			*			*		*	Grad use +/-
27	6	U of Mich - Ann Arbor	4.0					*	*	*	*		*	*	*	
46	6	UIUC	4.0	*	*		*	*	*	*	*	*		*	*	
16	9	Cornell U.	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
49	9	UT- Austin		*	*	*	*	*	*	*	*	*	*	*	*	
56	9	Purdue U - W. Lafayette	4.0	*			*		*	*			*	*	*	
1	12	Princeton U.	4.0	*	*	*	*	*	*	*	*		*		*	
76	13	VA Tech		*		•			*	*			*		*	
10	14	Johns Hopkins U.	4.0	*	*	*	*		*	*	*	*	*		3	
10	14	Northwestern U.		*	*	*	*	*	*	*			*		*	
49	14	UW-Madison		*	x	x	*	x	x	*			*		*	Uses AB style grades
66	14	Tex A&M - College Station		*	x	x	*	x	x	*			*		*	Uses AB style grades
3	18	Columbia U.	4.3	*	*			*	*	*					*	
8	18	Duke U.	4.0	*				1	*			*	*		*	
16	18	Rice U.	4.3	*	*	*	*	*	*	*	*	*		*	*	
19	18	UC-LA	4.0	*	*		*	*	*	*	*	*		*	*	
41	18	UC-SD	4.0	*	*		*		*		*		*		*	
59	18	U of Wash		*	*	*	*		*	*	*	*	*	*	*	
2	24	Harvard U.		*				10	*:	*	*	*	*	*.	*	
8	24	U. of Pennsylvania	4.0	*			2		*	*		*	*		*	
22	24	U. of Southern California					*		*	*	*	*			*	
59	24	Pen State U U Park		*	*	*	*	*	*	*			*		*	
63	24	U MD - College Park	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
49	30	RPI		*		*	*	*	*	*	*	*	*		*	
56	30	Ohio State U - Columbus		*	*	*	*		*	*	*	*	*		*	

Ran	k	Top 100 Under	grad Englis			uoc		, .	.01		•					
National	Engr	School	A+	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F	Comments
3	32	Yale U.		*	*	*	*	*	*	*	*	*	*	*	*	
30	32	UC- SB	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
35	32	U of FL		*	*	*	*	*	*	*	*	*	*	*	*	
38	32	UC - Davis	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
80	32	NC State U - Raleigh	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
96	32	UC Bolder		*	*	*	*	*	*	*	*	*	*	*	*	
14	38	Brown U.		*	П		*			*						
14	38	Vanderbilt U.	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
19	38	Washington U.		*	*	*	*	*	*	*	*	*	*	*	*	
25	38	U of VA		*	х	x	*	х	x	*	х	х	*	х	*	+/- not used in GPA
115	38	AZ State U - Tempe	4.3	*	*	*	*	*	*	*	П		*	Г	*	
18	43	U. of Notre Dame		*	*	*	*	*	*	*	*	П	*		*	
33	43	UC-Irvine	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
42	43	Case Western Reserve	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
80	43	CO Sch of Mines		*	*	*	*	*	*	*	*	*	*	*	*	
119	43	Iowa State U.		*	*	*	*	*	*	*	*	*	*	*	*	
12	48	Dartmouth College		*	*	*	*	*	*	*	*	П	*	П	*	Posts median grades
42	48	Boston U		*	*	*	*	*	*	*	*		*		*	
44	48	Northeastern U.		*	*	*	*	*	*	*	*	*	*	*	*	
53	48	Lehigh U.		*	*	*	*	*	*	*	*	*	*	*	*	
56	48	Rutgers U - New Brunswick		*	х	х	*	х	х	*			*		*	Uses AB style grades
70	48	U of Pitt	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
85	48	Mich State		*	х	х	*	х	x	*	х	х	*		*	Uses AB style grades
66	55	Clemson U		*			*			*			*		*	
89	55	U of Delaware		*	*	*	*	*	*	*	*	*	*	*	*	
102	55	Drexel U	4.0	*	*	*	*	*	*	*	*	*	*		*	
106	55	U of AZ		*			*			*			*		*	
27	59	Tufts U.		*	*	*	*	*	*	*	*	*	*	*	*	
30	59	U of NC - Chapel Hill		*	*	*	*	*	*	*	*	*	*		*	
59	59	Woster Polytech Inst		*			*			*						

			US New	s &	Wo	rld F	Repo	ort 2	019	Ran	king	3				
Ran	L .	Top 100 Undergra	d Engin	eeri	ng (doct	tora	te) +	To	p 10	0 Na	atio	nal (Jniv	ersi	ties
National		School	A+	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F	Comments
124		U of OK	74.	*			*	_		*	_		*	_	*	Commence
129		U of Alabama	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
147	87	U of Cincinnati		*	*	*	*	*	*	*	*	*	*	*	*	
147		U of KY		*			*	Т		*			*	Т	*	
152	87	U of AR		*	Н		*			*			*	Г	*	
157	87	OK State U		*			*			*			*	Г	*	Uses F!
165		U of MD - Baltimore County		*	х	х	*	х	х	*	х	х	*	х	*	Grad use +/-
171		U of Houston		*	*	*	*	*	*	*	*	*	*	*	*	,
187	87	Texas Tech U		*	х	х	*	х	х	*	х	х	*		*	Uses AB style grades
187	87	U of NM		*	*	*	*	*	*	*	*	*	*	*	*	, , , ,
194	87	U of NC - Charlotte		*	П		*	Т		*			*		*	
44	104	Tulane		*	*	*	*	*	*	*	*	*	*	*	*	
49	104	Villanova U.		*	*	*	*	*	*	*	*	*	*	*	*	
53	104	U of Miami		*	*	*	*	*	*	*	*	*	*		*	
59	104	So Methodist U.		*	*	*	*	*	*	*	*	*	*	*	*	
70	104	UC-SC	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
106	104	U of South Carolina		*	х	х	*	х	х	*	х	х	*		*	Uses AB style grades
124	104	U of South FL	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
129	104	U of MO - Columbia	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
136	104	George Mason U	4.0	*	*	*	*	*	*	*	*		*	П	*	
140	104	LA State U - Baton Rouge	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
177		MS State U		*	П		*	П		*			*	П	*	
	104	CUNY - City College	4.0	*	*	*	*	*	*	*	*		*		*	
78	106	Baylor U.		*	*	*	*	*	*	*	*	*	*	*	*	
80	106	Binghamton U - SUNY		*	*	*	*	*	*	*	*		*		*	
46	116	U of GA		*	*	*	*	*	*	*	*		*		*	
89	132	Howard U		*			*			*			*		*	
89	132	Marquette U.		*	*	*	*	*	*	*	*	*	*		*	
96		U of VT	4.0	*	*	*	*	*	*	*	*	*	*	*	*	

		Top 100 Und	US New ergrad Engin										nal (Jniv	ersit	ties
Ran	k															
National	Engr	School	A+	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F	Comments
70	59	U Mass - Amherst		*	*	*	*	*	*	*	*	*	*		*	
102	59	Rochester Inst Tech		*	*	*	*	*	*	*	*		*		*	
115	59	Auburn U		*			*			*			*		*	
115	59	U of Tenn		*	*	*	*	*	*	*	*	*	*	*	*	
119	59	U of UT		*	*	*	*	*	*	*	*	*	*	*	*	
30	67	NYU		*	*	*	*	*	*	*	*	*	*		*	
63	67	U Conn		*	*	*	*	*	*	*	*	*	*	*	*	
85	67	Stony Brook U - SUNY		*	*	*	*	*	*	*	*	*	*		*	
89	67	U at Baffalo - SUNY		*	*	*	*	*	*	*	*	*	*		*	
140	67	CO State U	4.0	*	*	*	*	*	*	*			*		*	
140	67	Oregon State U		*	*	*	*	*	*	*	*	*	*	*	*	
157	67	MS&T		*			*			*			*		*	
70	75	Stevens Inst Tech		*	*	*	*	*	*	*	*	*	*		*	
89	75	U of Iowa	4.3	*	*	*	*	*	*	*	*	*	*	*	*	
96	75	ILL Inst of Tech		*			*			*					*	Transfer grades not used in GPA
129	75	U of Ill - Chicago		*			*			*			*		*	
136	75	Mich Tech U		*	х	х	*	х	х	*	х	х	*		*	Uses AB style grade, uses F*
140	75	Washington State U		*	*	*	*	*	*	*	*	*	*		*	
33	80	U of Rochester		*	*	*	*	*	*	*	*	*	*	*	*	
53	80	Syracuse U.		*	*	*	*	*	*	*	*	*	*	*	*	
129	80	U of Kansas		*			*			*			*		*	
129	80	U of NB - Lincoln	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
129	80	UT - Dallas	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
147	80	Kansas State U		*			*			*			*		*	
165	80	U of Central FL		*	*	*	*	*	*	*	*	*	*	*	*	
63	87	George Washington U		*	*	*	*	*	*	*	*	*	*	*	*	
66	87	BYU - Provo		*	*	*	*	*	*	*	*	*	*	*	*	
85	87	UC - Riverside	4.0	*	*	*	*	*	*	*	*	*	*	*	*	
102	87	Clarkson U		*	х	х	*	х	х	*	х	х	*		*	Uses AB style grades
106	87	NJ Inst of Tech		*	x	x	*	х	х	*			*		*	Uses AB style grades

Rani National 1																					
		School	A+	A	A-	B+	В	B-	C+	С	C-	D+	D	D-	F		C-	mme			
1		Harvey Mudd College	A		_	*	*	*	*	*	*	*	*	D-	*		CO		ents		
1		Rose-Hulman Inst. of Tech	_	*	x	х	*	х	х	*	х	х	*		*	Hee	ος ΛΕ	2 ctvl	e gra	loc	
3		Olin College of Engr.	_			*	*	*	*	*	*	*	*		*	Use	25 AL	Styl	egra	ies	
4		US Military Academy	4.3		*	*	*	*	*	*	*		*		*						
4		US Naval Academy	4		_		*			*			*		*		_	_			_
6		Bucknell U.		*		*	*	*	*	*	*		*		*						
6		US Air Force Academy	_	*	_		*			*			*	\vdash	*						
8		Cal Poly - San Luis Obispo	_	*	*	*	*	*	*	*	*	*	*	*	*						
9		Cooper Union	+	*	*	*	*	*	*	*	*	*	*	*	*						
9		Milwaukee School of Engr.	_	*	х	х	*	x	х	*	х	х	*		*	Hea	ος ΔΕ	3 ctv	e gra	los	
11		Cal Poly - Pomona		*		*	*	*	*	*	*	*	*	*	*	036	3 AL	Jacy	e gra	163	
11		· · · · · · · · · · · · · · · · · · ·	_																		
•		Lafayette College		*	*	*	*	*	*	*	*	*	*	*	*						
Rani	,	Lafayette College University Mis	souri S			nd C	omp	*		*	*	*	* Univ	*	* ities						
Rani		University Mis		yste	em a			ara	ble I	* Priva	*			* /ers			Co	mme	ents		
Rani National 157	Engr	-	souri S	yste	em a			*		* Priva	*	MO D+		*	* ities		Со	mme	ents		
National	Engr 67	University Mis		ysto	em a		В	ara	ble I	* Priv:	*		D	* /ers	F		Co	mme	ents		
National 157	Engr 67	University Mis School MS&T	A+	ysto	A-	B+	B *	* B-	ble I	Priva C	* C-	D+	D *	* D-	F *		Со	mme	ents		
National 157 129	Engr 67	University Mis School MS&T U of MO - Columbia	A+	yste	A-	B+	B *	aral B-	C+	Priva	te l	D+	D *	* D-	F *		Со	mme	ents		
National 157 129	Engr 67 104	University Mis School MS&T U of MO - Columbia U of MO - St. Louis	A+	ysto	A-	B+	B * *	B-	C+	Priva	* C- *	D+	D * *	* D- *	* *		Со	mme	ents		

	k		I.	/IISS	ouri	Stat	e U	nive	rsiti	es										_
National		School	A+	Α	Α-	B+	В	B-	C+	С	C-	D+	D	D-	F		Com	ment	ts	
		Missouri State U.			*		*		*	*	*		*		*					
		Harris Stowe State U.		*	*		*	*	*	*	*	*	*	*						
		Lincoln U.		*			*			*			*		*					\neg
		MO Southern State U.		*			*			*			*		*					
		MO Western State U.		*			*			*			*		*					
		Northwest MO State U.		*			*						*		*					
		Southeast MO State U.		*			*						*		*					
		Truman State U.					*						*		*					
		U. of Central MO					*						*		*					
Vational	Engr	School	A+	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F		Com	ment	ts	_
		Crowder College	_		\Box		*		_			-	*	_						\dashv
		East Central College	_									\perp								_
		Jefferson College	_		\perp	_	*	-							*					\dashv
		Metropolitan CC - KC	_		-								*	_						\rightarrow
		Mineral Area College	_				*													
		MO State - West Plains	-		-		*		_			_		_						-
	_	Moberly Area CC	_		-	-	*	-	_			_		_						\dashv
	_	North Central Missouri College Ozarks Tech CC	+		\dashv		*	-	-			-		_	*					\dashv
	_	St. Charles CC	_		\vdash		*	-	-		-		*	-	*					\dashv
					-				_			-		_	*					\rightarrow
		State Fair CC																		

Other Universities and Colleges - Summary

- > Top 100 national + top 100 Engineering (doctorate)
 - 86% Use finer granularity in grades than S&T
 - 78% use +/- grades from A through at least C-
 - 33% use A+ grades
 - > 72% of A+ grades have same numeric value as A grade
- > Top 11 Engineering non-doctorate
 - 9 use +/- grades
- > UM System, Wash U, SLU
 - All use +/- grades, except S&T
- > Missouri State Universities
 - Most do not use +/- grades (MSU, Harris Stow exceptions)
- > Missouri Community Colleges
 - None use +/- grades



Student Affairs Committee

- > Received written comments
- > Generally, but not universally, in favor of +/- grades

Freshman Engineering

> In favor of +/- grades



Student Council

- > Strongly opposed to summer 2018 AF&S motion at FS
- > Strongest objections seemed to be that C- would not satisfy the "C or better" prerequisite requirement
- > Concerned about impact on academic standing
- > Concerned that +/- grades create a barrier to graduation



Council of Graduate Students

- > Mixed comments
- > More opposed to change than favoring it
- > Concerned about cost of implementation
- > Concerned that +/- grades may lower average GPA



S&T Athletics

- > Opposes +/- grades
- > Concerned about lowering GPA
- > May impact
 - Eligibility to compete
 - Eligibility for some awards
 - Financial assistance



Registrar

- > Difficult to implement new system prior to fall 2020
- > Primary cost of implementation would be C- grade policy
- > Estimate something over 100 person-hours to implement
- > +/- grades may lower long-term software development and maintenance costs, as they would bring us in line with other UM system campuses



Impact of +/- Grades on Average Student GPA

- > In recent memory, AF&S and the Faculty Senate have not tracked average student GPA
- > AF&S and the Faculty Senate have not set a target for average student GPA
- > AF&S has not previously reviewed policy decisions to see if they will move a metric we don't measure toward a target we have not set
- > Did not find comprehensive, peer reviewed, analysis or meta analysis – of how +/- grading policy impacts mean student GPA
- > Many anecdotal studies



Impact of +/- Grades on Number of 4.0 GraduatesSame issues as average GPA

- > AF&S / FS do not track this metric
- > AF&S / FS have not set targets for this metric
- > Discussed, but did not select, using A+ grade.



C- Grades

- > AF&S has changed its position since summer 2018
- > Now recommend that C- grades satisfy "C or higher" prerequisite requirements
- > All GPA calculations (cumulative, campus, major, academic status) would still have 2.000 requirements.
- > Added clarification that C- grades could be replaced in GPA calculations if a student repeated the course at S&T
- > Considered omitting C-, D+ and D- grades. Did not select that option.



AF&S Discussion and Proposal

- > Many on committee concerned that current system forces instructors to assign the same grade to students with substantially different levels of performance
- > Proposed system would allow instructors who prefer the current grading system to continue using it
- > Final vote on motion
 - 7 in favor
 - 1 opposed
 - 0 abstentions



Motion (for Feb 2019 Faculty Senate Meeting)

Starting with fall semester 2020, S&T will expand its current A through F course grading system, to include the use of + and - modifiers, as described below.

Courses can use either an A through F system, or a satisfactory / unsatisfactory (S/U) system. The A through F grading system is appropriate for those subjects and situations that allow discrimination in quality of achievement and performance. The S/U system is more appropriate for students wishing to take elective courses in a subject matter field in which they will be competing with majors, for mastery learning situations, and for courses graded primarily on the basis of attendance.

The grades available in the expanded A through F system, and their effect on grade point average calculations, will be: A (4.0), A-(3.7), B+(3.3), B (3.0), B-(2.7), C+(2.3), C (2.0), C-(1.7), D+(1.3), D (1.0), D-(0.7), F (0.0).

Graduate students will not be allowed to earn grades of D+, D or D-.

(Continued on next page)



Motion (for Feb 2019 Faculty Senate Meeting)

(Continued from previous page)

The S and U grades will not be incorporated in the grade point average calculations.

All regulations applicable on a course-by-course basis, and tied to a specific letter grade, will be interpreted to mean a specific letter grade range. Hence, if current regulations specify a student must achieve a C in one course in order to proceed to another course, under the new grading system, the student must achieve a grade in the C range, which includes the grade of C-.

All regulations currently tied to a specific grade average will be interpreted to mean the numerical average currently associated with that specific grade. Hence, a required C average or better on all courses will be a 2.000 average or better.

(Continued on next page)



Motion (for Feb 2019 Faculty Senate Meeting)

(Continued from previous page)

Students will be allowed to replace grades in all courses in which they have obtained a C- or lower. The first sentence of Section VIII.G of the S&T Student Academic Regulations will be changed from:

"Effective with Missouri S&T coursework repeated Fall of 2001 or later, when a grade of "D" or "F" is received in a Missouri S&T course, the grade may be replaced in the calculation of the GPA if the course is repeated at Missouri S&T."

to:

"When a grade of C-, D+, D, D- or F is received in a Missouri S&T course, the grade may be replaced in the calculation of the GPA if the course is repeated at Missouri S&T."

Intellectual Property Committee Meeting Minutes

3 December 2018

Attendees: Jonathan Kimball (chair), Keith Strassner (ex officio), Mariesa Crow, Jay Switzer, Greg Gelles, David Wright, Baojun Bai

Keith Strassner gave a presentation on FY18, with a preview of FY19 YTD. Highlights include:

- Royal income of \$530k (just off the peak of \$559k in FY17)
- 50 disclosures received (record!)
- 8 patents/copyrights issued
- 32 active licenses/options, 3 pending
- FY19 is on a similar track, with 20 disclosures, \$247k royalty income, 6 patents/copyrights issued
- By all metrics, S&T is far out-performing comparable schools, including Georgia Tech. In particular, we have 1.28 disclosures per \$M research and \$14,048 license income per \$M research. Georgia Tech is at 0.38 and \$2047, respectively.

Regarding opportunities and challenges:

- We have a diverse royalty income base
- We have three new initiatives that will enhance our overall profile:
 - Express license for faculty start-ups
 - TTED funding for early stage development
 - Agreements where the sponsor owns the IP, with a 20% up-charge that partially returns to TT
- There is a concern about "centralization" of TT function as a "shared service"

Next, the group discussed the IP assignment agreement that was rolled out through MyHR in August. The agreement was developed by UM System attorneys with input from Mizzou research administrators. It is unclear how much involvement the tech transfer offices had.

As of November 13, of those who are required to agree:

- 68.0% at S&T have said yes
- 74.6% at Mizzou
- 41.8% at UM System (that is, individuals with only a UM System appointment)
- A substantial fraction of individuals have not logged into MyHR, and so have not responded either way

We reviewed the motivation: a specific change to the Bayh-Dole act that now **requires a written agreement to be in place before conducting any work on a federally funded project**. We discussed the concerns that have been raised by various faculty, including at the RP&A meetings. We also reviewed the language in the new agreement, the existing invention disclosure, and the existing university patent assignment documents. The consensus was:

- The new agreement does not clearly delineate the fact that this condition only applies to federally-funded research.
- The language of the further assurances clause differs significantly from prior agreements that have been through faculty governance, i.e., the Patent Committee (see CRR 100.020 paragraph E).
- The good faith execution of the further assurances, and more broadly the whole agreement, rests on a level of trust between the faculty and administration. However, the heavy-handed roll-out of this agreement did not establish such trust.

After some discussion, the committee agreed to introduce a resolution to the Faculty Senate. Below is a first draft of the resolution:

The Faculty Senate of the Missouri University of Science and Technology acknowledges the additional requirements imposed by changes to 37 C.F.R. § 401.14(f)(2), which require a written agreement prior to the execution of federally-funded research. However, we cannot advise faculty to execute the agreement that has been implemented via MyHR. We hereby request:

- 1. That the language be changed to explicitly restrict applicability to federally-funded research;
- 2. That the language be changed to mirror existing language in the invention disclosure, particularly in regards to the further assurances clause;
- 3. That a different process be used so that the agreement is tied to specific federal grants and contracts, rather than as a blanket statement with indeterminate applicability; and
- 4. That the UM System Patent Committee, at a minimum, be involved in all further matters regarding the Bayh-Dole Act and its changes.

In addition, we asked Keith Strassner to pursue updates to the proposed FAQ that did not adequately address the issues raised.

Intellectual Property Committee

Motion to Faculty Senate, 24 January 2019

The IP committee moves that the Faculty Senate approve the following resolution:

The Faculty Senate of the Missouri University of Science and Technology acknowledges the additional requirements imposed by changes to 37 C.F.R. § 401.14(f)(2), which require a written agreement prior to the execution of federally-funded research. However, we cannot advise faculty to execute the agreement that has been implemented via MyHR in August 2018. We request the following actions of the Vice President of Research and Economic Development at the University of Missouri System (https://www.umsystem.edu/ums/red):

- 1. That the language in the agreement be changed to explicitly restrict applicability to federally-funded research;
- 2. That the language in the agreement be changed to mirror existing language in the invention disclosure (Form UM 16C rev. 09.15.15)¹, particularly in regards to the further assurances clause;
- 3. That a different process be used so that the agreement is tied to specific federal grants and contracts, rather than as a blanket statement with indeterminate applicability; and
- 4. That the UM System Patent Committee, at a minimum, be involved in all further matters regarding the Bayh-Dole Act and its changes.

¹Available at: