

Faculty Workload Standards/Policies

The University of Missouri's colleges and schools have diverse and unique missions and the sources of financial support to meet these missions can be just as distinctive (<u>UM Intercampus</u> Faculty Council Workload Report). Since its establishment in 1870, the College of Agriculture, Food and Natural Resources (CAFNR) has historically embraced the three missions of a land-grant university – providing accessible educational opportunities (teaching), conducting applied and basic research (research), and delivering research-based information to enhance the quality of life and economic well-being of all Missouri citizens (extension). CAFNR has several distinct missions and unique sources of funding (e.g., Agricultural Experiment Station (AES), Extension, Academic Programs) that contribute to faculty workload assignments. The overarching principle is that workload standards should provide flexibility to ensure faculty are engaged in teaching and to provide for differential teaching loads based on the research or extension responsibility to achieve the overall mission of the academic division.

The assignment of faculty workload is governed by the University of Missouri System Collected Rules and Regulations. The CRR workload policy (CRR 310.080) calls for altered assignments for faculty based on the needs of the departments. Specifically, "At the time of the annual review of the performance of the faculty member (CRR 310.015), the Department Chair [Division Director], in consultation with the individual faculty member, will determine a faculty member's assignments and distribution of effort in the areas of teaching, research, service and administration relative to the departmental workload standard. ... The workload may be assigned for the coming academic year or for multiple years up to the tenure review for untenured faculty, or the five-year post-tenure review for tenured faculty. Assignments among faculty members will vary to meet the objectives of the department."

In accordance with the UM Faculty Workload Policy, the Division of Plant Science and Technology has established the following workload standards for teaching, extension, research, and service. All faculty members contribute service. Tenured/tenure-track faculty within the Division typically participate in two of the three other activity areas, with research/teaching and extension/research the most common combinations. Non-tenure-track faculty typically participate in a single activity area.

The standard, base UM faculty workload is 40% teaching, 40% research, and 20% service. However, within the Division of Plant Science and Technology, many tenured, tenure-track faculty members with research or Extension appointments are supported by federal funds (i.e. Agricultural Experiment Station (AES) or Extension). Federal government rules require that AES funds can only be used to support the research mission. Similarly, federal Extension funds can solely be used in support of extension. Consequently, workload for these faculty members differs from the UM faculty workload standards. For example, a common effort distribution will be 60%/30% for AES funded research/teaching faculty and 60%/30% for Extension/AES funded research faculty, in addition to a 10% service expectation.



The division director conducts an annual performance evaluation for the previous calendar year of all tenured, tenure-track, and ranked non-tenure track faculty, and will apply the following overall performance ratings:

- Satisfactory Exceptional performance
- Satisfactory Meets expectations
- Satisfactory Needs improvement
- Unsatisfactory
- Not applicable

The faculty workload expectations outlined below are based on a 3-year rolling average, and describe the performance expectations to receive a satisfactory – meets expectation evaluation.

Failure to meet workload standards may result in actions allowable in either the Collective Rules and Regulations of the University or the <u>CAFNR Tenured Faculty Evaluation Practise</u>.

TEACHING & ADVISING STANDARDS:

Faculty are engaged in a variety of student learning experiences within and outside the formal learning environment. Faculty engage with students through class, laboratory and online instruction, experiential learning, academic and career advising, study abroad programs, undergraduate research, and extracurricular activities. The following standards provide consistent and equitable instructional workloads among faculty.

- 1. No regular faculty member can be assigned either fewer than 12 section credits or fewer than 180 student credit hours per academic year without an instructional adjustment requested by the Division Director and issued by the Dean (<u>CRR 310.080.E</u>). This standard is based on an appointment of 40% Research, 40% Teaching and 20% Service. Any deviation from this appointment due to Federal fund support will be prorated. For example, a 30% Teaching appointment would mean a minimum responsibility of 9 section credits or 135 student credit hours, and a 20% teaching appointment, a minimum responsibility of 6 section credits or 90 student credit hours. Faculty with a 0% teaching appointment are exempt from the teaching standards and would not be required to obtain a waiver.
- 2. All tenured faculty with a teaching and research appointment should maintain at least a 10% teaching appointment and teach or co-teach at least one 3-credit course per academic year. With division director approval, a faculty member may reduce teaching workload by buying out a specific course assignment at the level of the workload expectation of that course and proportional to the faculty member's annual salary, or, more generally, may reduce teaching workload by buying out a course assignment at the level of 10% 9-month FTE, or by adding Extension responsibilities commensurate to the FTE reduction in teaching.
- The teaching workload will be based on 3.3% of workload effort per credit hour of instruction for a 9-month academic year. Therefore, one 3-credit course will be interpreted as fulfilling 10% of a faculty member's 9-month academic year workload (4-credit course = 13%, 5-credit



course = 16.5%). A 3.3% academic year (AY) workload appointment corresponds to a 2.73% calendar year (CY) workload appointment, and therefore a 3-credit course corresponds to a 8.19% CY workload. Teaching appointments outside these benchmarks may be adjusted by the Division Director based on, but not limited to, course enrollments (see 3.1) and course attributes (e.g., laboratory, discussion sections, online) (see 3.2).

- 3.1 Adjustments for the higher teaching efforts in large enrollment courses (based on a 9month academic year workload):
 - 3.1.1 Enrollment of 41 to 80 = 1.25 credits awarded for 1 course credit (e.g., 3-credits x 3.3% x 1.25 = 12.5%).
 - 3.1.2 Enrollment of 81 to 120: 1.5 credits awarded for 1 course credit (e.g., 3-credits x 3.3% x 1.50 = 15%)
 - 3.1.3 Enrollment of 121 to 160 = 1.75 credits awarded for 1 course credit (e.g., 3-credits x 3.3% x 1.75 = 17.5%).
 - 3.1.4 Enrollment greater than 160 = 2.0 credits awarded for 1 course credit (e.g., 3-credits x 3.3% x 2.0 = 20.0%).
- 3.2 Adjustments for teaching laboratory sections or writing intensive courses directly taught by the faculty member (based on a 9-month academic year workload):
 - 3.2.1 Addition of 0.25 credits per laboratory section (e.g., 3-credits x 3.3% x (1.25 + 0.25) = 15% for one laboratory section with 41 to 80 students).
 - 3.2.2 Addition of 0.25 credits per writing intensive course (e.g., 3-credits x 3.3% x (1.25 + 0.25) = 15% for one laboratory section with 41 to 80 students).
- 4. Faculty should receive proportional workload effort for co-taught courses based on their contribution. Calculations of workload effort for courses with co-instructors will be calculated proportional to the instructor's contribution as defined by load factor assigned in the university's registration system (MyZou). Some courses are designed to have a main coordinator and more than one instructor per course period. In recognition of the synergy that can result from the simultaneous interactions of two faculty (course coordinator and an additional faculty) with students, faculty members who justify their role as course coordinator to the Division Director may receive up to 100% credit for the course.
- 5. Cross-listed courses, also referred to as "combined sections", will be treated as a single course using the combined enrollment.
- 6. Cross-level courses (4000/7000), also referred to as "combined sections", will be treated as a single course using the combined enrollment.
- 7. With division director (DD) approval, early career faculty (assistant professors) may have their teaching appointment reduced by 50% during the first two years and by 25% during the third year of their probationary period. With DD approval, early career release may be deferred



within the pre-tenure years. Faculty are expected to participate in teaching and research professional development opportunities offered through the Office of the Provost.

- 8. Faculty assigned to teach and mentor undergraduate students in research may fulfill a portion of their teaching appointment based on the following:
 - 8.1 An undergraduate student, who completes a research experience either for zero or earned academic credit under the guidance of a faculty member contributes with 1% to the faculty's AY teaching workload effort per semester (e.g., 1 student, enrolled for the fall and spring semester = 2% of AY workload effort).
 - 9.2 An undergraduate student, who completes a full-time research experience during the summer semester either for zero or earned academic credit under the guidance of a faculty member contributes with 2% to the faculty's AY teaching workload effort.
- 9. Faculty assigned as an academic advisor or career mentor to undergraduate students may fulfill a portion of their teaching workload based on the following:
 - 9.1 Six undergraduate academic advisees, as assigned within the university's registration system, shall be interpreted as 1% of AY workload effort for each semester (fall and spring) advised (e.g., 12 advisees = 2% of AY workload effort for each semester).
 - 9.2 For hybrid advising models (i.e., faculty serving as career mentors in collaboration with professional advisers) the faculty workload effort shall be reduced by 50% (e.g., 12 advisees = 1% of AY workload effort for each semester).
 - 9.3 Given the complexity of academic advising and efficiencies, a faculty member shall advise a minimum of 12 students.
- 10. Faculty assigned to mentor and prepare graduate students for research may fulfill a portion of their teaching appointment based on the following:
 - 10.1 One M.S. advisee, as assigned within the university's registration system, shall be interpreted as 0.75% AY workload effort for each semester, capped at 7.5% (e.g., 5 advisees = 3.75% of workload per semester).
 - 10.2 One Ph.D. advisee, as assigned within the university's registration system, shall be interpreted as 1.5% AY workload effort per semester, capped at 10% (e.g., 3 advisees = 4.5% of workload effort per semester).
- 11. The Division offers high-quality teaching programs to its undergraduate and graduate students, and it is expected that faculty members continously adapt and evolve their courses to improve the learning experience for their students. According to the Policy and Procedures for Promotion and Tenure (<u>CRR 320.035.2c</u>), "Teaching of all faculty members shall be evaluated annually". A significant element in the evaluation is the overall judgment of students, and if the three-year average of the teaching evaluations for overall course quality



fall under 3.0, faculty are expected to provide evidence for the participation in <u>professional</u> <u>development opportunities</u> for teaching offered through the Office of the Provost, or initiate a <u>peer review process for the enhancement of instruction</u>.

- 12. Faculty who are actively involved in the development of new courses or significant curriculum development activities can receive up to 10% AY teaching workload credits for these efforts. After consultation with the Division Director:
 - 12.1 Faculty, who make larger adjustments to their existing courses, and for example change the course delivery method (e.g. from face-to-face instruction to online) or integrate innovative teaching components in courses that strengthen the student's ability to apply the process of science, to use quantitative reasoning, to use modeling and simulation, to communicate and collaborate with other disciplines, or to understand the relationship between science and society (see Vision and Change in Undergraduate Biology Education) can receive a one-time addition of up to 10% of the course credits (e.g., addition of 0.1 course credits per 1 credit course, or 0.3 course credits per 3 credit course);
 - 12.2 Faculty, who develop a new course for the curriculum can receive a one-time addition of up to 30% of the course credits (e.g., addition of 0.3 course credits per 1 credit course, or 1.2 course credits per 3 credit course);
 - 12.3 Faculty, who play an active role in the development of new curriculum (e.g., new graduate or undergraduate programs) can receive a one-time addition of up to 50% teaching workload credits.

EXTENSION STANDARDS:

Extension faculty members are appointed by the university as "State Specialists." Their primary role is to serve as scientific authorities for the state of Missouri, providing subject matter expertise in all things related to agricultural production. Extension specialists within the Division provide expertise in a broad range of areas, such as row crops, e.g. soybean, corn, wheat, cotton, and rice; horticultural production, e.g. turfgrass, viticulture, fruits and vegetables; forages as pasture and hay crops; management of weeds, diseases, insect pests, soils, irrigation, and nutrients; and other agricultural production issues, such as bioprocessing and bioenergy engineering, aquaculture, agricultural water quality, interdisciplinary extension for the lifestock industries, precision agriculture, pesticide application technologies, and agricultural machinery management. For more information, see also "The Role and Responsibilities of State Specialists in Agriculture and Natural Resources Extension at the University of Missouri".

MU Extension expects all programs to document impact. Long-term impact can be documented only after years of effort. Short and intermediate-term measures, however, should indicate the trajectory of the program, and the effort of the extension specialist. Two broad measures are applied to measure short and intermediate effects of extension activities: Resources and Reach. Resources measure non-university funding expended for Extension



program development; and Reach provides a measure of the number of constituents engaged with the program.

Key extension work activities for State Specialists within the Division include:

- 1. **Proactive Teaching:** As faculty with academic rank, State Specialists are expected to develop and deliver high-priority curricula that reach their clientele. Key steps include needs assessment, prioritization, funding, curriculum development, delivery, and documented impact. The level of outside funding (grants, gifts, fees, etc.) expended for this foundational area should at least represent 50% of the paid salary and benefits invested in the faculty member (based on a 100% Extension FTE; using a three-year-rolling average). State Specialists will spend 30% to 60% of their extension workload reaching clientele in this role.
- 2. **Responsive Extension**: State Specialists serve as scientific experts who respond to questions and crises as they arise throughout the state. Typically, State Specialists should expect to spend 15 to 40% of their extension workload reaching clientele and supporting off-campus Extension Professionals as these needs dictate.
- 3. Liaison: State Specialists are expected to fulfill liaison duties with public stakeholders, such as key farmers, private companies, commodity groups, and government agencies. While the specialists fulfill work primarily within the state of Missouri, they also fulfill their liaison roles in national and international efforts. The amount of extension workload expected for liaison efforts varies among faculty members but ranges from 10 to 25 %.
- 4. **Training Extension Professionals**: State Specialists leverage their efforts to reach clientele by training extension professionals who work in regional offices statewide. State specialists should expect to offer and/or teach in at least two of these classes (ISE's) each year. Typical State Specialists will spend 10 to 20% of their extension workload in this role.
- 5. **Media:** State Specialists work with the popular press and social media to address current issues relevant to the public. State Specialists with a 100% extension workload should expect to have fifty media mentions each year with a total readership of 1M and/or 5,000 social media engagements. Typical State Specialists will spend 10 to 15% of their extension workload in this role.
- 6. **Research and Education:** NTT State Specialists, who have a 100% appointment in Extension, also engage in scholarly activities that develop their careers and contribute to the university's mission. NTT State Specialists conduct research or contribute to research projects that address applied production problems. They can also contribute to education by for example mentoring graduate students. NTT State Specialists spend 10 % of their extension workload in these efforts.



RESEARCH STANDARDS:

Research will include activities carried out in laboratories, greenhouses and under field conditions as appropriate to the specific discipline and project. Each faculty member with a research appointment is expected to develop a coherent, well-rounded and disciplineappropriate research program that contributes to the divisional and college strategic priorities. The focus and scope of the research program should be reflective of the professional interests of the faculty member. The productivity of a research program is defined by the discipline dependent funding that it attracts, and the dissemination of research results. To lead a research program requires to secure sufficient financial support to fund this research program. Securing of financial support is a continuous process of preparation of requests and management of active funds. The level of sufficient funding should be appropriate for a particular programmatic area, and may require consultation between the faculty member and the Division Director. To lead a research program also requires the continuous dissemination of results with a discipline dependent audience, for example via peer-reviewed journal publications, technical publications, data archives, books and book chapters; contributed papers, posters, presentations at professional meetings; invited presentations at other institutions, national/international seminars; and non-peer reviewed publications. Assessment of research outcomes and financial support will be made on basis of a three-year rolling average with flexibility to accommodate the start-up period for recently hired faculty. The guidelines described below are annual expectations, based on 100% Research FTE. The research standards for the Division include:

1. Funding

- 1.1 Faculty should explore and actively seek funding from different sources to sufficiently support their research program as PI or Co-PI, PD or Co-PD, and
- 1.2 Faculty should serve as an investigator (PI, Co-PI, PD or Co-PD) on an extramural grant or contract and the management of a research program with total annual expenditures equivalent to a minimum of 50% of the salary and benefits of their research appointment (40% of the salary and benefits for a 80% research appointment, 30% of the salary and benefits for a 60% research appointment). Adjustments to these expectations can be made to reflect differences in the levels of appropriate funding for different disciplines. The funding level, however, should be sufficient to for example fund a graduate student or a lab technician for the research program).

2. Scholarly Efforts and Outputs

Faculty should actively disseminate the results of their research program. To demonstrate their contributions to the scientific community, faculty with a 100% Research appointment should reach 75 dissemination points (60 dissemination points for faculty with a 80% research appointment, 45 dissemination points for faculty with a 60% research appointment). Assistant Professors are not required to have dissemination points during the first two years of their appointment. For example peer-reviewed papers, technical publications, books and book chapters; contributed papers, posters, presentations at professional meetings; or invited presentations at other institutions, national/international seminars; non-peer reviewed



publications, and patents contribute to the generation of dissemination points, and take into consideration the presumed impact of a scientific contribution (e.g. ranking of peer reviewed journal publications as indexed by ISI Web of Science).

The following table provides an overview of dissemination points for different categories:

Category	First, senior or corresponding author	Co-author
Paper: non-peer reviewed	7.5	3.75
Paper: peer reviewed (Rank: 1 – 49% in the discipline)	10	5
Paper: peer reviewed (Rank: 50 – 74% in the discipline)	15	7.5
Paper: peer reviewed (Rank: top 25% in the discipline)	20	10
Paper: peer reviewed (top journals, e.g. Science, Nature, PNAS)	25	12.5
Review article (Rank: 1-49% within discipline)	10	5
Review article (Rank: 51-100% within discipline)	15	7.5
Book Author	40	20
Monograph Author	30	15
Book chapter: invited, peer-reviewed	15	7.5
Book chapter (non-peer reviewed, extension materials)	5	2.5
Popular articles for the general public	5	2.5
Book Editor	20	15
Poster presentation at local or regional conference	3	1.5
Poster presentation at national or international conference	5	2.5
Oral conference presentation (non-competitive)	3	
Oral conference presentation (invited)	5	
Key note address at national or international	10	
conference		
Invited talk at other University	5	
Web page content	5	
Intellectual property: Invention declared	10	% contribution
Intellectual property: Patent awarded	25	% contribution
Advisor of a completed thesis or dissertation	5	

SERVICE STANDARDS:

Faculty are expected to demonstrate professional collegiality, leadership, and professional citizenship by their service contributions. A balance is expected between service within and outside the division. In general, a faculty member would be expected to allocate no more than 20% of their time to professional service. Engagement in various public service activities outside the University and the profession (e.g., civic clubs) although admirable, does not constitute



service and is not weighed in workload decisions. Active participation in faculty meetings is expected and is not counted towards service workload standards.

Faculty service encompasses a broad range of activities from the local level of the Division through the international level of professional organizations and committees. It is reasonable for newly hired faculty to focus for the first two years of their appointment on their teaching, research or extension program, before they get engaged in service activities. After 2 years, junior faculty members should first participate primarily in activities at the Division and College level, and to some degree in their professional networks. As faculty are promoted to Associate and full Professor, it is expected that the scope of service activities will become more broad and that faculty at full rank will participate in leadership roles at the campus and system level within the university and in national and international efforts within their professional networks. Activities weighed in service workload decisions are as follows:

- **1. Institutional Service:** Faculty shall participate in faculty governance and provide meaningful service to the institution through:
 - 1.1 Committee assignments at the division, college, university, or system level. It is recognized, that serving as chair of a committee involves a greater time commitment than serving as a committee member, and some committees require a greater time commitment than others;
 - 1.2 Serving as director of graduate or undergraduate studies;
 - 1.3 Student recruitment events and and other outreach activities for the program, division, and college;
 - 1.4 Participating as a reviewer for internally funded programs;
 - 1.5 Advising program, college, and university recognized student organizations;
 - 1.6 Advising/mentoring/coaching an intra- or extra-curricular student competitive team;
 - 1.7 Contributes to the professional development of colleagues through mentoring.
- 2. Professional Service: Faculty shall provide service to professional societies, associations, and organizations through:
 - 2.1 Editor or editorial board of professional society journals;
 - 2.2 Participating in activities of professional societies and associations, especially leadership positions and committee activities within such organizations;
 - 2.3 Reviewing journal articles, selected paper and poster submissions, and research proposals;
 - 2.4 Participating as a reviewer or review panel member for external funding organizations;
 - 2.5 Reviewing governmental reports, non-governmental organization studies, academic staff reports, etc.
 - 2.6 Organizes or serves as chair of a regional, national or international professional disciplinerelated organization or conference
 - **3. Engagement:** Faculty may engage with external stakeholders and stakeholder groups, including, but not limited to:



- 3.1 Delivery of analytic results to decision makers at local, state, federal or international levels;
- 3.2 Presentations to industry groups, government agencies, community organizations, and other public groups;
- 3.3 Providing content and data appearing in magazine or trade publications, policy fact sheets, discipline-relevant websites, etc.