



Division of Plant Sciences

University of Missouri

Faculty Workload Standards/Policies

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, “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. Assignments among faculty members will vary to meet the objectives of the department.”

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 ([UM Intercampus 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 citizens of the state (extension). CAFNR has several distinct missions and unique sources of funding (e.g., Agricultural Experiment Station (AES), Extension) 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 research responsibility to achieve the overall mission of the academic division.

In accordance with the UM Faculty Workload Policy, the Division of Plant Sciences 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 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 Sciences, 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 be used in support

of research only. Similarly, federal extension funds can be used solely in support of extension. Consequently, workload for these faculty members differs from the UM faculty workload standard. 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 the 10% service expectation. Within the Division, other tenured/tenure-track faculty members are supported by Food for the 21st Century (F21C). The standard, base workload for these faculty members is 20% teaching, 70% research, and 10% service.

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 for 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 waiver [adjustment] requested by the Division Director and issued by the Dean ([CRR 310.080.E](#)). This standard is based on an appointment of 40% Research, 40% Teaching and 20% Service. Any deviation from this appointment because of Federal or F21C fund support will be prorated. For example, an appointment of 60% Research, 30% Teaching and 10% Service would mean that the minimum for faculty would be 9 section credits or fewer than 135 student credit hours. Further, faculty with an appointment of 70% research, 20% teaching and 10% service would have minimum responsibility for 6 section credits or less than 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. Teaching workload will be based on 3.3% of workload effort per credit hour of instruction. Therefore, one 3-credit course will be interpreted as fulfilling 10% of a faculty member's annual workload (4-credit course = 13%, 5-credit course = 16.5%). Teaching appointments outside these benchmarks may be adjusted by the Division Director based on, but not limited to, course enrollments and course attributes (e.g., laboratory, discussion sections, online).
 - 2.1 Adjustments may be granted for large enrollment courses based on the following:
 - 2.1.1 Enrollment of 61 to 120 = 1.35 credits awarded for the course (e.g., 3-credit course x 1.35 = 4.1 credits x 3.3% = 13.5%).
 - 2.1.2 Enrollment of 121 to 180 = 1.7 credits awarded for the course (e.g., 3-credit course x 1.7 = 5.1 credits x 3.3% = 16.8%).
 - 2.1.3 Enrollment greater than 180 = 2.0 credits awarded for the course (e.g., 3-credit course = 20.0%).

- 2.2 Adjustments may be granted by the Division Director for teaching multiple laboratory sections based on the credit hours associated with the laboratory section(s).
3. Faculty should receive proportional workload effort for co-taught courses based on their contribution. Some courses are designed to have more than one instructor per course period in recognition of the synergy which comes from the simultaneous interactions of multiple faculty. Faculty members who justify this course structure to the Division Director may each receive up to 100% credit for the course.
4. 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.
5. Faculty engagement in academic and career advising and advising of recognized student organizations should receive proportional workload credit.
 - 5.1 Faculty assigned to advise undergraduate students may fulfill a portion of their teaching appointment based on the following:
 - 5.1.1 Six (6) undergraduate advisees, as assigned in the university's registration system, will be interpreted as 1% of workload effort each semester (fall and spring) advised (e.g., 24 advisees = 4% per semester).
 - 5.1.2 For hybrid advising models (i.e., faculty advisers/mentors in conjunction with professional advisers) the faculty workload effort will be reduced by 50% (e.g., 12 advisees = 1% of workload effort).
 - 5.1.3 Given the complexity of academic advising, it is recommended that faculty advise a minimum of 12 advisees.
 - 5.2 The advising of intra and extra-curricular student organizations will be considered a component of a faculty member's service.
 - 5.3 The formal coursework completed by graduate students in the Division of Plant Sciences is only one facet of the teaching that occurs during a graduate degree; in fact, the major emphasis of our degrees involves the completion of a thesis or dissertation in a process that is similar to an apprenticeship. Graduate students must be taught specific techniques in order to complete experiments, how to analyze the results of the experiments, and how to properly assemble their experimental results into an oral presentation or publication. All of these activities are a form of teaching that necessitates intensive input and expertise on the part of the advisor; this time commitment is not adequately captured through the application of research credits (8090 and 9090) and also is not merely a component of our research workload. Each MS student advised by a faculty member will correspond to the equivalent of 0.7% of workload effort per semester (fall, spring, summer), capped at 7.0%. Each PhD student advised by a faculty member will correspond to the equivalent of 1.5% of workload effort per semester (fall, spring, summer), capped at 10.0%.

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 crop production. Areas of expertise within Plant Sciences Extension include row crops, such as soybean, corn, wheat, cotton, and rice, as well as horticultural production, such as turfgrass, viticulture, and fruits and vegetables. Expertise also includes forages, which are pasture and hay crops that support livestock production. Finally, expertise in Plant Sciences addresses weeds, diseases, insect pests, soils, irrigation, and nutrient management.

- **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 time expected for liaison efforts varies among faculty members but ranges from 10 to 25 %.
- **Reactive Extension:** State Specialists are the “go-to” experts who respond to questions and crises as they arise throughout the state. The typical State Specialist are expected to spend 10 to 50% of his/her time addressing these questions and crises.
- **Proactive Teaching:** As faculty with academic rank, State Specialists are expected to develop and deliver high priority curricula related to prioritized needs of their clientele. Details for proactive teaching, including assessment, prioritization, development, delivery, and documentation of impact, are included in the MU Extension document, “Role of the State Specialist.” State Specialists are generally expected to spend 25% to 75% time in this role.
- **Training Educators:** State Specialists are expected to train extension specialists who work in the county offices and who serve at the front line, interacting with the public. In some cases, they are expected to train local educators who partner with MU Extension, as well as specialists from other states. The typical State Specialist should be spending 10 to 25% time in this role.
- **Media:** State Specialists work with the popular press media to address current issues relevant to the public. The typical State Specialist should be spending 5% time in this role.
- **Research and Education:** Research and education are described elsewhere in the Plant Sciences workload document. However, it should be mentioned here that NTT State Specialists, who have a 100% appointment in Extension, also engage in scholarly activities that develop their careers and contribute to the university mission. The NTT State Specialists conduct research that addresses applied production problems. They also mentor graduate students, which is an educational activity. The NTT State Specialists spend 10 to 30% 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. The productivity of a research program is defined by peer-reviewed papers, book chapters and technical publications. Dissemination of research outcomes will be assessed based on outlets that are discipline

appropriate such as peer-reviewed papers, but also may include websites, bulletins, data archives, and videos, in addition to peer-reviewed papers. It is expected that a faculty member will complete the equivalent of one peer-reviewed publication annually for each 25% research responsibility. Other types of research communications will contribute to the research productivity. Examples include: 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 will be made on a four-year rolling averages basis with flexibility to accommodate the start-up period for recently hired faculty.

In its broadest sense, research includes securing financial support, in addition to the conduct of work and dissemination of results. Securing of financial support is a continuous process of preparation of requests and management of active funds. The level of funding should be appropriate to a programmatic area, recognizing that research programs change over time, in consultation between the faculty member and the Division Director. Appropriate funding levels will be assessed using a four-year rolling average framework.

SERVICE 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. As noted above, we expect faculty to engage in service activities at 10% of annual effort. It is reasonable to expect newly hired faculty to participate primarily in activities at the Division and College level, and to some degree in their professional networks. As faculty are promoted to Assistant, Associate and full Professor, it is reasonable to expect 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.