School of Mechanical Engineering
TEACHING LOAD MODEL
August 14, 2021

At the request of the Head, the ME UG Curriculum Committee has developed a Teaching Load Model based on percent effort. The objective of this model is to capture and accurately measure the effort of faculty for the instructional component of their duties (in addition to research and service duties). The framework begins with a base model incorporating the effects of enrollment and assigned support, and then identifies other added roles that would increase the load further.

1. BASE LOADS

1.1. ME Undergraduate Courses

Enrollment:	Support:	Teaching Load:
12* < Enrollment < 40	Up to 10 hrs/wk of UG Grader	Load = 11%/cr hr
40 < Enrollment < 80	Up to 20 hrs/wk of UG Grader or ¼ TA**	Load = 11%/cr hr
80 < Enrollment < 120+	Up to 40 hrs/wk of UG Grader or ½ TA**	Load = 11%/cr hr

*Minimum Enrollment is 12 Students for UG Courses.
**Faculty of Record have the option to choose between utilizing UG graders or Graduate TAs

Specialty Cases:
- One ME 263 Lab will count as 11%
- One section of ME 463 will count as 22% (since 1 cr hr is for the Lecture).
- One Section of EPICS = 11%.

For UG Core Lab Classes:
One ¼ TA or UGTA (up to 10 hrs/wk) for each Lab section plus one ¼ TA as a supervising TA (assuming a faculty member is not assigned, e.g., ME 263 and ME 352). Elective lab courses will be assigned TA support based on overall course enrollment as prescribed above.

Special TA Cases:
- ME 365/375 Labs: TAs will be expected to cover 2 Labs for each ¼ TA since these are offered in alternate weeks. Also, one UGTA (10 hrs/wk) will be assigned to 2 labs to assist with the MyRio prelabs.
- ME 263: One ½ TA per lab
- ME 463: Does not use TAs so this course will be an exception to the standard TA model.

Tutorial Room Support: Tutorial rooms should be staffed by the TAs assigned to the courses via the baseload model presented above. The supervising faculty member of multi-section courses should draw appropriate TA hours from each section to staff the tutorial room.

Supervising Lab: Faculty assigned to supervise a large-enrollment, multi-section labs (e.g., ME 309, ME 315, etc.) will be given 11% teaching credit.

1.2. ME Graduate Courses

Enrollment	**Support**	**Load**
6/9* < Enrollment < 25	No TA Support**	Load = 11%/cr hr
25 < Enrollment < 50	¼ TA for Grading	Load = 11%/cr hr
50 < Enrollment < 75	½ TA for Grading	Load = 11%/cr hr
For any additional 25	¼ TA for Grading	

*Minimum Enrollment is 6 Students for 600-level courses and 9 Students for 500-Level Courses
**Suitable hourly graders (if available) can be used for up to 10 hrs/wk.

For Graduate Courses with Lab: one ¼ TA for each Lab section

2. ADDED LOADS

Beyond the base loads, some other special roles merit added teaching loads as outlined below.

Course Supervision – Any instructor who is supervising a multi-section ME core course receives additional teaching load of 5.5% for multi-section core courses, such as ME 315 and ME 365, and 11% for multi-section service courses, such as ME 200 and ME 270.

Lab Supervision – Instructors teaching core courses that involve supervising large-enrollment, multi-section lab activities where there is not a separate faculty assigned to these duties (e.g., ME 263, ME 365, ME 375, etc.), receive added teaching load depending on student numbers and credit hours as outlined in the base loads.

Major Course Update – Any instructor who is taking on a major course revision (e.g., similar to the recent ME 365, NE 375, and ME 475 revisions) receives a minimum of 11% of teaching load for this effort.

New Course Development – Any instructor who is developing a new course receives a minimum of 11% teaching load for this effort.

Teaching a Course for the First Time – When teaching a course for the first time, a minimum of 11% teaching load will be assigned.

3. PROJECT-BASED COURSES

The teaching load for project-based courses for a given semester will be determined based on the student credit hours each faculty earned as indicated in Table 1 and Figure 1. Student credit hours will be calculated based the nature of projects, including students taking:

- Credit-bearing courses. These courses include Vertically Integrated Projects (VIP), EPICS, SURF (for credit hours), ME 297/498/499, offered to undergraduate students, as well as ME 597 offered to professional master students and non-thesis master students. Student credit hours will be determined based the number of students enrolled, and the number of credit hours each student signed up for.

- Non-credit bearing projects. These projects include paid undergraduate research, voluntary research, voluntary design (e.g., SAE, Solar Racing, Grand Prix), ME summer program, SURF (for pay), student competition teams. Student credit hours will be calculated based on the average number of hours per week each student works. Each student credit hour is equivalent to 4 hours per week working load for a student. For example, if a student works in a laboratory for 12 hours per week, 3 student credit hours will be given to the faculty advisor. Students are required to report their activities and effort through the Simplicity Database. Faculty mentors are required to approve the report for each student, who voluntarily works in their laboratory.

Table 1: % Teaching Load for Project-Based Credit Hours per Semester

Student Credit Hours per Semester	% Teaching Load per semester	Example Teaching Assignments
3	2	1 student at 3 credit hours
10	8	5 students at 2 credit hours
15	11	5 students at 3 credit hours
30	17	15 students at 2 credit hours
50	20	25 students at 2 credit hours
75	22	25 students at 3 credit hours

4. % TEACHING LOAD VS. AY SUPPORT MODEL

The following expectation of percent teaching loads per AY as a function of AY salary support as outlined in Table 2 and Figure 2 apply.

Table 2: Expectation of % AY Support versus Corresponding Teaching Load per AY

Expectation of % AY Salary Support	Corresponding % Teaching Load per AY	Examples of Corresponding % Teaching Load in Courses per AY
0	67	4 Lect. Courses
5	50	3 Lect. Courses
7	44	2 Lect. Courses + 2 EPICS/VIP course
10	38	2 Lect. Courses + S* (or + P*)
13	33	2 Lect. Courses
33	22	1 Lect. Course + 1 EPICS/VIP course
50	18	1 Lect. Course
60	11	1 EPICS/VIP course
67	0	0

*S = Supervision of Multi-Division Courses
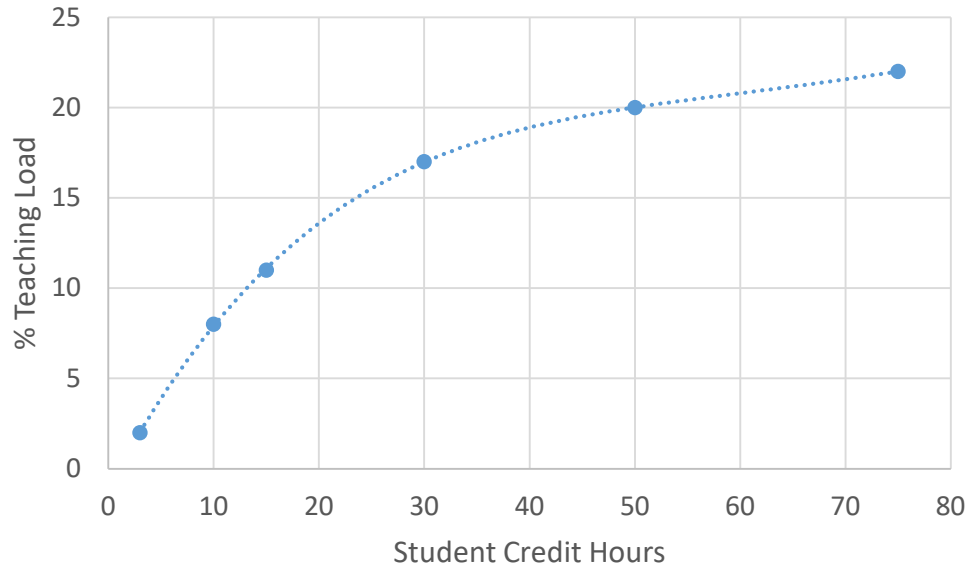*P = Project-Based Teaching Load (as outlined above)

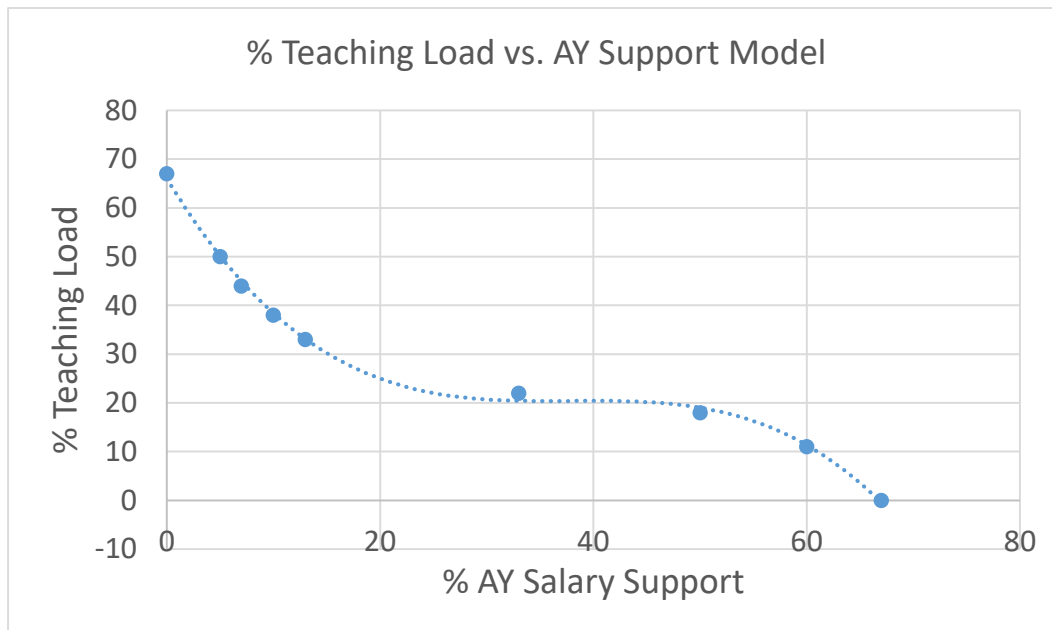Figure 1: % Teaching Load for Project-Based Credit Hours per Semester

Figure 2: % Teaching Load per AY versus Expectation of % AY Salary Support

% Teaching Load per AY of Assistant Professors (pre-tenure):
- 33% teaching load for first 3 years at 0% AY Salary Support
- 33% teaching load for years 4, 5 and 6 at 5% AY Salary Support
- 38% teaching load for years 4, 5 and 6 at 0% AY Salary Support
- After year 6, teaching load model as outlined above applies

5. COURSE ASSIGNMENTS

In general, all ME faculty, except for the ones who have significant administrative appointments are asked to teach one 3-credit hour, lecture-based course per semester as long as the faculty member provides 10% or more of AY salary support during the academic year. This "base" teaching load is needed considering the number of students in the ME undergraduate and graduate programs. When instructors teach project-based courses, they will be able to use the increase in teaching load to reduce their AY salary support, or have some of the "overpay" of their AY salary support come back to them as unrestricted support. However, instructors cannot use the project-based teaching load to replace the 3-credit hour, lecture-based course.

In addition, small variations in AY salary support from the expected 10% level will be used to identify faculty who have available capacity when a special need arises in the School.

Faculty members who do not provide any AY salary support (0%) and do not advise any graduate students are expected to teach four courses per academic year.