April 1, 2015

Dear Junior MEs:

It is time to start planning for your senior writing experience. Please read through this document carefully so that you are aware of your options. The senior writing experience is a college wide requirement that is satisfied in the ME Department by the new course MER487 (Writing Seminar, description on the next page) or MER498 (Senior Project) taken as one of three options:

**Option 1: MER487 (Writing Seminar) & ME Elective**
- The ME Electives for next year are tentatively: Spaceflight Mechanics (F), Solar Energy Analysis & Design (F), Mechatronics Design (W), Advanced Materials (W), Internal Combustion Engines (S), Orthopaedic Device Design & Development (S).
- **What you need to do now:** Think about thesis topics & submit senior writing placement form (attached) by 5/15/15.

**Option 2: MER487 (Writing Seminar) & MER494/5/6 (Team Practicum)**
- Team Projects: Human Powered Vehicle, Baja & SAE Aero (2-4 people per team)
- **What you need to do now:** (1) Get your resume together (2) Interview with team advisor and team captains (3) Get hired! (4) Submit senior writing placement form (attached) by 5/15/15.

**Option 3: MER497 (Senior Project) & MER498 (Pre-requisites: MER333, MER311)**
- Student/Faculty independent projects (research &/or design oriented)
- MER497 offered F/W MER498 offered W/S (only)
- **What you need to do now:** (1) Talk to faculty about project ideas (2) Get your resume together & put together a project proposal (3) If needed (to pitch your own original idea) sign up for presentation slot on 4/24 or 5/1 (4) Get selected! (4) Submit senior writing placement form (attached) by 5/15.

There will be two rounds for MER497/8 placement. There are slots for approximately 40 senior projects this year (this does not count those taking the “team” option). Faculty will select 30-33 of these in the initial round (by 5/15/15). Your goal is to get a faculty advisor to select you in this initial round. However even if you do not get selected in the first round, all students wishing to do a 497/8 senior project are to submit their forms by May 15. Those without a faculty signature indicating that they have been selected will be discussed at a faculty meeting where additional projects may be assigned. If you are not selected in this second round you will be placed in option #1.

The spring term seminar (Fridays, Common Hour) is designed to help you learn more about these options so it is important that you attend. I have attached a description of MER 487, a description of the senior writing requirements, a tentative spring term seminar schedule and a copy of the senior writing placement form.

Sincerely,

Ann M. Anderson  
Agnes S. MacDonald Professor of Mechanical Engineering  
Thomas J. Watson, Sr. and Emma Watson Day Chair of Mechanical Engineering
Information about MER487:

The ultimate goal of this course is to write a thesis (i.e., a final paper). The thesis may be original research, original design or review paper (Please note, this means you can do original research or design with this option). The course structure will involve: (a) Topic identification with primary references; (b) Proposal & oral presentation; (c) Sequential submission of paper sections; (d) Incorporation of feedback from professor and peers; (e) Final paper & presentation; and (f) Literature reviews throughout course. Offered spring term only.

Information about the Senior Writing Experience (from course catalogue):

Senior Writing Experiences will normally involve theses, special seminars, research projects, project reports or independent studies...this course should include regular meetings between student and faculty member, the submission of segments or drafts for written response by the faculty member, and rewrites with written and/or oral evaluation throughout the term of the project.

Student Presentations:

Students wishing to pursue the senior project option with a project idea of their own have an opportunity to pitch their ideas to the faculty during seminar in the 4th and 5th weeks of the term. This presentation should be 3-5 minutes long and include the information such as: Specific Project Goal, Background Information, Project Tasks and Project Timeline. This presentation and your project proposal are the two chief opportunities for you to make your case for the merits of your project and to convince an adviser to select you.

Spring term seminar Schedule (tentative, check ME webpage for updates):

4/3: Introduction to Seminar / Senior Writing & Design Options / Team Presentations

4/9 (Thurs): MER498 Poster Previews: 4/10 (Fri) Outside Speaker (Dr. Covey)

4/17: Faculty Project Idea Presentations
Team project hires will be finalized.

4/24: Student Presentations (MER 497/8)

5/1: Student Presentations (MER 497/8).
Faculty will start to select projects in initial round.

5/8: Steinmetz Symposium (No Seminar)

5/15: Outside Speaker: (Justin Rodriguez, ME ’11, PhD Candidate, Tufts University)
Senior Writing Placement Forms Due

5/22: Outside Speaker: (Dr. Smitesh Bakrania, ME ’03, Associate Professor, Rowan University)
Faculty will select projects in second round and final assignments will be made.

5/29: Post Grad Opportunities (Career Center, PostGrad Fellowships, Watson Fellowship)

6/5: MER 498 Posters and Elevator Pitches.
Senior Writing Placement Form

Students who plan to graduate in June, 2016 need to complete this form and return it to the department chair by May 15, 2015. Please indicate which option you will use to satisfy your senior writing requirement and obtain appropriate signatures. If you plan to enroll in MER497/8 you also need to attach a project proposal.

Note: If you plan to enroll in MER497/498 at any point during the 2015/16 academic year you must find an advisor now and complete this form. Students who do not do so will not be allowed to register for MER497 or MER498 during AY 2015-2016.

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OPTION 1:       MER 487 + Tech Elective

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OPTION 2:       MER 487 + Team Practicum (MER494/495/496)
Team:          SAE Aero    ASME HPV    SAE Baja(?)
Team Role:     
Team Adviser Name:     
Team Adviser Signature:     Date:     

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OPTION 3:       MER 497 + MER 498 (attach project proposal to this form)
Terms:         Fall/Winter    Fall/Spring    Winter/Spring
Project Title:     
Project Advisor Name:     
Project Advisor Signature:     Date:     

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Student Name:     
Signature:     Date:     

Academic Adviser Signature:     Date:     
Department Chair Signature:     Date:     