Mechanical Engineering Preliminary Examination - Guidelines for ME Students

Prepared April 2016

The preliminary examination is held each year in late March or early April. This examination is required for all PhD students and should be attempted within the first two years of the graduate degree (although faculty advisors may encourage/require their students to take the exams in their first year).

Before the Exam:

- You will be contacted by the Preliminary Exam Chair in December the year before exam
- At that time, if you have not taken the exam before, you will be asked to choose three of the following six possible exam topic areas: Thermodynamics, Fluid Mechanics, Heat Transfer, Dynamics, Controls or Solid Mechanics
- The Preliminary Exam Chair will provide any necessary materials related to the exams you have chosen, e.g. example problems or equation sheet
- You should communicate only with the Preliminary Exam Chair, your PhD adviser and the SoE graduate office staff depending on the nature of your questions related to the exam
- You will not be told which faculty members are responsible for the exams and you should not try to contact individual faculty regarding exam content, etc.

During the Exam:

- The exam is closed book unless otherwise indicated
- You should bring only something to write with (no paper, unless otherwise indicated) and a calculator (if allowed)
- You will have two hours to complete each exam and you must turn in what you have done to Preliminary Exam Chair at the end of each of the two hour periods

After the Exam:

- Each preliminary exam will be graded and discussed by the ME faculty
- There are four possible outcomes:
  i. Pass – You performed well on all exams taken and pass completely
  ii. Partial pass – You performed well on two exams, but poorly on the third, so you will be given the option to retake the exam in that same topic area next time when the exam is next offered (this option can only be given once)
  iii. Fail with a retake option – You performed poorly on two or more of the exams taken, but can retake all three exams in the same topic areas when the exam is next offered (this option can only be given once)
  iv. Fail with no option to retake – Your performance was unsatisfactory in all areas and/or this is your second failed attempt at the exam, so no retake option is available.
- The final results will be communicated to you by the Preliminary Exam Chair, but no discussions on the results, the exam problems or your graded solutions will be provided or shown.