



WISCONSIN

UNIVERSITY OF WISCONSIN-MADISON

University of Wisconsin - Madison
College of Engineering [EGR]
Last Offered: 2013 Spring [1134]
Direct Link to this Syllabus :

<http://aefis.engr.wisc.edu/index.cfm/page/CourseAdmin.ViewABET?coursecatalogid=67&pdf=True>

1. **CBE 525, Macromolecular Hydrodynamics**
 2. **Credits : 3 Contact Hours :**
 3. **Textbook and Materials :**
 4. **Specific Course Information :**
 - a. **Brief description of the content of the course (Course Catalog Description) :** Observed phenomena in polymeric flow systems. Techniques of viscometry and viscoelastic measurements for polymeric fluids. Rheological models. Analytical solutions to flow problems: non-Newtonian viscosity, linear viscoelasticity, normal stresses, recoil, stress relaxation, etc. Dimensional analysis. Unit operations of the polymer industry: extrusion, blow molding, injection molding, mixing.
 - b. **Pre-requisites or Co-requisites :** CBE 320 or ME 363 or equivalent or consent of instructor
- **Specific Goals for the Course :**
 - a. **Course Outcomes :**
 - b. **ABET Student Learning Outcomes :**