

*University of Notre Dame*  
*Department of Aerospace and Mechanical Engineering*

**AME 50542**

**Manufacturing Processes for Engineering Materials**

**Spring 2018**

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Instructor:	Ryan K. Roeder, Professor 148 Multidisciplinary Research Building, Fri. 1-2 p.m. <a href="mailto:rroeder@nd.edu">rroeder@nd.edu</a> <a href="http://www.nd.edu/~rroeder">http://www.nd.edu/~rroeder</a>
Lecture:	MWF 11:30 a.m. – 12:20 p.m., DBRT 131
Course Calendar:	<a href="http://webcal://p44-calendars.icloud.com/published/...">webcal://p44-calendars.icloud.com/published/...</a>
Teaching Assistants:	Tyler Curtis, <a href="mailto:tcurtis2@nd.edu">tcurtis2@nd.edu</a> , MRB 225, Thur. 4-5 p.m. Tyler Finamore, <a href="mailto:tfinamor@nd.edu">tfinamor@nd.edu</a> , MRB 225, Thur. 4-5 p.m. Govinda Padmanabha, <a href="mailto:ganantha@nd.edu">ganantha@nd.edu</a> , Cushing 321, Tues. 9-10 a.m. Jessica Schiltz, <a href="mailto:jschiltz@nd.edu">jschiltz@nd.edu</a> , MRB 225, Mon. 2-3 p.m.
Office Hours:	See above.
Required Textbook:	S. Kalpakjian and S.R. Schmid, <i>Manufacturing Processes for Engineering Materials</i> , 5th Ed., Prentice Hall, 2008.
Prerequisites:	AME 20241 Mechanics of Materials
GOALS:	The goals of this course are to (1) introduce the fundamental processes used in manufacturing ( <i>How things are made.</i> ), (2) relate the effects of manufacturing processes on material structure, properties and performance ( <i>How things are best made.</i> ), and (3) consider the implications of manufacturing on the design process ( <i>How things are designed to be best made.</i> ).
Grading:	Midterm      25%      in class March 7 Final Exam    25%      May 9, 4:15-6:15 p.m., location TBD Homework      50%      handed out in class and posted on website
Examinations:	Exam format and content will be announced in class. The final exam will be comprehensive but biased toward the more recent material. Exams will be taken as scheduled, except in the case of illness or serious emergency. Contact the instructor <i>before the exam</i> to schedule a makeup exam.
Homework:	Use of mathematical software packages (e.g. Matlab, Mathcad, etc.) is encouraged. Discussion of homework problems is also encouraged; however, each student is expected to submit his or her own independent solution. Late homework will generally not be accepted except in the case of illness or serious emergency. Contact the instructor <i>before the due date</i> (if possible) to arrange an acceptable due date.
Class Participation:	In order to participate in class, one must be present and prepared. Lectures will involve discussion of reading or homework assignments.
Academic Honesty:	Students should be familiar with the Academic Code of Honor ( <a href="http://honorcode.nd.edu">http://honorcode.nd.edu</a> ). Working together, asking questions of classmates, or assisting others on exams is prohibited.

*Additions, amendments, or corrections to this syllabus may be made throughout the semester via in class announcements, handouts, or e-mail.*