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Syllabus

COURSE HOME

This course was originally offered in Course 13 (Department of Ocean Engineering) as 13.472J. In 2005, ocean engineering subjects became part of Course 2 (Department of Mechanical Engineering), and this course was renamed 2.158J.

SYLLABUS

Course Meeting Times

Lectures: 2 sessions / week, 1.5 hours / session

CALENDAR

Course Prerequisites

Permission of instructor (Subject requires typical undergraduate mathematics, eg. ordinary differential equations, introductory linear algebra and numerical analysis, and a high level programming language.)

READINGS

Course Grading (Individual Effort)

- PS1 on Differential Geometry: 15%
- PS2 on B-splines and NURBS: 25%
- PS3 on Blends, GCs and Intersections: 20%
- PS4 on Non-Linear Solver and Offsets: 25%
- PS5 on Solid Modeling: 15%

LECTURE NOTES

ASSIGNMENTS

RELATED RESOURCES

DOWNLOAD COURSE MATERIALS

Required Textbook

- [Buy at Amazon](#) Patrikalakis, N. M., T. Maekawa, and W. Cho. *Shape Interrogation for Computer Aided Design and Manufacturing*. New York, NY: Springer Verlag, 2010. ISBN: 978-3642040733. (Available from Springer: [printed](#), [electronic](#))
- Additional lecture notes will be handed out in class.

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