

Nipissing University
Department of Computer Science & Mathematics
MATH 2216 - Computational Geometry I
Winter 2012

Course Outline

- **Class Hours**

Lectures: Mon, Wed, 3:30–5:00PM, Room H304

- **Instructor**

Dr. Tzvetalin S. Vassilev

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Office Hours: Mon, Wed 1:00–3:30PM,

Tue, Thu 10:00AM–12:00PM or by appointment

- **Required Text**

Mark de Berg, Otfried Cheong, Marc van Kreveld, and Mark Overmars,
Computational Geometry: Algorithms and Applications,
3rd Edition, Springer-Verlag, 2008, ISBN: 978-3-540-77973-5

- **Course Content**

The course is based on Chapters 1–5 of the text.

Topics Include: Convex Hulls, Line Segment Intersection, Planar Subdivisions and Overlays, Art Gallery Problem, Triangulation, Randomized Incremental Algorithms, Range Searching, and others as time permits.

- **Evaluation**

Assignments – 40%

Midterm examination – 20%

Final examination – 40%

- **Examinations**

– Date of the midterm examination:

Wednesday, March 14, 2012

– Date of final examination:

TBD

– Midterm examination will be 90 minutes long and will be held during the time slot normally allocated for the lecture.

– Midterm and final examinations will be open book.

- **Assignments**

– There will be 4 homework assignments.

– Problems will be assigned from the text.

– Due date for each assignment will be announced.

– No late work will be accepted.