SYLLABUS/COURSE OUTLINE
DIFFERENTIAL GEOMETRY: MATH 762

WINTER TERM 2017

Instructor's Name: David Duncan

Instructor's Email: duncand[at]math.mcmaster.ca

Instructor's Office: Hamilton Hall 319

Office Hours: M, Th after class; also by appointment

Lecture Times and Location: M, Th: 11-12:30 in Hamilton Hall 312

Course Webpage: http://ms.mcmaster.ca/∼duncand/Math762.html

Textbook: Lee's *Introduction to Smooth Manifolds*; additional references will be supplied as the course progresses

Course Description: Connections of fiber bundles, curvature, topological and analytic properties of Riemannian manifolds.

Homework: Homework will be assigned approximately every two weeks.

Presentation/Final Project: Each student will be required to do one of the following: (i) give an in-class presentation about a selected topic, or (ii) submit a final project on a selected topic. More details will be given later in the term.

Final Grades: Here is the breakdown of how your final grade will be computed:

Homework	50 %
Presentation/Final Project	50 %

Official Policies:

1. *Exemptions from course work.* If you are absent from the university for a minor medical reason, lasting fewer than 3 days, you may report your absence, once per term, without documentation, using the McMaster Student Absence Form (MSAF). Absences for a longer duration, or for other reasons, must be reported to your Faculty/Program office, with documentation, and relief from term work may not necessarily be granted. When using the MSAF, also report your absence to your instructor by email (normally within 2 working days). For Math 762, the percentages for exempted assignments and midterm tests will be transferred to the final examination. Please note that the MSAF may not be used for term work worth 25% or more, nor can it be used for the final examination. For more details, see

`http://academiccalendars.romcmaster.ca/content.php?catoid=13&navoid=2208`

(click the link for 'Requests for Relief for Missed Academic Term Work' near the top of the page).

2. *Academic ethics.* Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g., the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: 'Grade of F assigned for academic dishonesty'), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of a academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3. The following illustrates only three forms of academic dishonesty:

(i) Plagiarism, e.g., the submission of work that is not one's own or for which other credit has been obtained.
(ii) Improper collaboration in group work.
(iii) Copying or using unauthorized aids in tests and examinations.

Important Message: The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.