

<p style="text-align: center;"><b>MAST 219</b> Multivariable Calculus II <i>Winter 2005</i></p>
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**Instructor:** Dr. M. Mei, Office: LB 541-1 (SGW), Phone: 848-2424, Ext. 3236  
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**Office Hours:** \_\_\_\_\_

**Prerequisites:** Concordia MAST 218 or equivalent.

**Text:** *Multivariable Calculus*, 5th Edition, by J. Stewart.

**Tests & Exams:** A one-hour midterm test will be given in week 7 weighing 40%.

**Final Grade:**

Final examination	100%
or	
Mid-Term	40%
Final examination	60%

**Assignments:** Assignments are very important as they indicate the level of difficulty of the problems that the student is expected to solve. Therefore, every effort should be made to do with them. Solutions are available (after the assignments are returned) at the Copy Centre.

Week	Sections	Topics	Assignments
1	16.1 - 16.3	Double Integral Iterated Integrals	P. 1024: 3 P. 1030: 2, 6, 8, 11, 12, 19, 29 P. 1038: 9, 13, 18, 25, 26, 43, 46
2	16.4 - 16.5	Double Integrals in Polar Coordinates Applications	P. 1044: 10, 12, 13, 17, 24, 25, 36(a) P. 1054: 5
3	16.7 - 16.8	Triple & Iterated Integrals, Applications Integration in Cylindrical and Spherical Coordinates	P. 1066: 3, 9, 17, 31, 33 P. 1073: 7, 11, 13, 18, 20, 29, 36, 38
4	16.9	Change of Variables	P. 1084: 7, 12, 14, 18, 19 P. 1087: 31, 41
5	17.1 - 17.3	Vector Integrals, Line Integrals, The Fundamental Theorem	P. 1107: 1, 7, 10, 14, 31, 37 P. 1117: 8, 17, 20
6	17.4 - 17.5	Green's Theorem Curl and Divergence	P. 1124: 4, 9, 10, 11, 18, 19 P. 1132: 3, 15, 20, 25, 31
7	17.6 & 17.7	Parametric Surfaces, Tangent Planes and Normal Vectors, Surface Area, Surface Integrals	P. 1142: 6, 12, 21, 24, 31, 40, 43 P. 1155: 4, 6, 16, 23
8	17.8	Stokes Theorems	P. 1161: 2, 3, 8, 10, 20(b)
9	17.9	Divergence Theorem	P. 1168: 3, 8, 11, 15, 27
10	Only in the lecture notes	First Order Differential Equations (D.E.), Exact Solution Methods, Applications	From the lecture notes
11	18.1	Second Order Linear Equations (Non-Homogeneous)	P. 1138: 4, 13, 18, 23, 28
12	18.2	Second Order Linear Equations (Non-Homogeneous), Methods of Variation of Parameters & Undetermined Coefficients	P. 1190: 1, 2, 3, 9, 10, 22
13		<b>REVIEW</b>	