MATH 250

From **MIT Open Courseware:** Click on the links below to navigate to the relevant multi-variable calculus topics at MIT opencourseware:

Linear geometry and systems of linear equations
http://ocw.mit.edu/courses/mathematics/18-02sc-multivariable-calculus-fall-2010/part-a-vectors-determinants-and-planes/

http://ocw.mit.edu/courses/mathematics/18-02sc-multivariable-calculus-fall-2010/part-b-matrices-and-systems-of-equations/

Parametric equations
http://ocw.mit.edu/courses/mathematics/18-02sc-multivariable-calculus-fall-2010/part-c-parametric-equations-for-curves/

Level curves, contour plots, partial derivatives, tangent plane approximations and optimization:
http://ocw.mit.edu/courses/mathematics/18-02sc-multivariable-calculus-fall-2010/part-a-functions-of-two-variables-tangent-approximation-and-optimization/

Chain rule, gradient and directional derivatives:
http://ocw.mit.edu/courses/mathematics/18-02sc-multivariable-calculus-fall-2010/part-b-chain-rule-gradient-and-directional-derivatives/

Lagrange multipliers and constrained differentials:
http://ocw.mit.edu/courses/mathematics/18-02sc-multivariable-calculus-fall-2010/part-c-lagrange-multipliers-and-constrained-differentials/

Double and triple integrals and change of variables:
http://ocw.mit.edu/courses/mathematics/18-02sc-multivariable-calculus-fall-2010/part-a-double-integrals/

http://ocw.mit.edu/courses/mathematics/18-02sc-multivariable-calculus-fall-2010/part-a-triple-integrals/

From Khan Academy:

The following link navigates to a large number of lessons on multi-variable calculus at Khan Academy:
http://www.khanacademy.org/math/calculus/#math/calculus

Other Links:

The following link navigates to a series of older lecture videos on multi-variable calculus from MIT opencoursewares youtube channel:
http://www.youtube.com/playlist?list=PL1C22D4DED943EF7B&feature=plcp