Errata for the Corrected Publication (2019) of
A Course in Multivariable Calculus and Analysis

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In the following, "line $+i$" means the ith line from the top, whereas "line $-i$" means the ith line from the bottom. The text to be changed appears in red, while the corrected version appears in blue. In addition, we acknowledge the name of the person who first pointed out a correction listed here, by mentioning it in green color (and hyperlinking it to that person's web page, whenever possible) inside square brackets at the rightmost end of the line.

Page 37, Line +20 to +22: Change the entire Exercise 24 to Let D be a convex subset of $\mathbb{R}^2$ and let f be a convex function on D. If (x, y) and $(-x, -y)$ belong to D, then show that $(0, 0) \in D$ and $2f(0, 0) \leq f(x, y) + f(-x, -y)$. [Mounob Das and Mohak Chugh]

Page 85, Line −10 : Change D to D_1 [Abhaya Chitre]

Page 97, Line +4 : Change $f_{i,j}$ to $g_{i,j}$ [Abhaya Chitre]

Page 117, Line +7: Change differentiable to nonconstant differentiable

Page 117, Line +8: Change does not vanish to vanishes

Page 122, Line −5 : Change $\begin{bmatrix} \frac{\partial x}{\partial t} \\ \\ \frac{\partial y}{\partial t} \end{bmatrix}$ to $\begin{bmatrix} \frac{dx}{dt} \\ \\ \frac{dy}{dt} \end{bmatrix}$ [Abhaya Chitre]

Page 123, Line −3: Change (at two places) $\frac{dF}{dz}$ to $\frac{dg}{dz}$

Page 124, Lines +10, +11, −14, −13: Change $\frac{\partial F}{\partial x}$ to $\frac{\partial f}{\partial x}$

Page 124, Lines +10, +11, −14, −13: Change $\frac{\partial F}{\partial y}$ to $\frac{\partial f}{\partial y}$

Page 163, Line +15: Change vanishes to is equal to the zero vector

Page 163, Line +20: Change $\nabla f = \lambda \nabla g$ to $\nabla f(x, y) = \lambda \nabla g(x, y)$

Page 165, Line +10: Change $\nabla f = \lambda \nabla g$ to $\nabla f(x, y, z) = \lambda \nabla g(x, y, z)$

Page 165, Line −17: Change ∇g to $\nabla g(x, y, z)$

Page 187, Line −10: Change $1/n, 1/k$ to $(b - a)/n, (d - c)/k$

Page 202, Line +2: Change P to P_ϵ

Page 202, Line −4: Change $f(x, y))$ to $f(x, y)$

Page 222, Line −4: Change subintervals to subrectangles

Page 223, Line +1: Change subintervals to subrectangles

Page 223, Lines −13, −9: Change any to an arbitrary [M. Thamban Nair]

Page 223, Line −8: Change double integrable to integrable

Page 349, Line −5: Change the the to the

Page 350, Line +10: Change of to under

Page 359, Line −6: Change tetrahedron D to tetrahedral region D in $\mathbb{R}^3$

Page 359, Line −4: Change polyhedron to polyhedral region

Page 416, Line −13: Change Proposition 5.19 to Proposition 5.20

Page 443, Lines +1: Change subsets D_n to subset D_n

Page 444, Lines +1: Change subsets D_n to subset D_n

Page 457, Line +17: Change diverge to ∞. (Hint: Divergence of to converge if $p > 1$ and diverge to ∞ if $p \leq 1$. (Hint: Convergence as well as divergence of

Page 473, Line −6, Left column: Change area, 186, 241 to area, 186, 241, 441

Page 475, Line +12, Right column: Drop iterated series, 381

Page 477, Line +10, Left column: Change smooth to smooth curve

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Please notify the authors if you know of errata not on the above list. Please write to one or both of the following:

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