This chart compares the equivalent sections of the UC Davis MAT 17C and (enter your college name here + course name and number).

**Calculus For Biology and Medicine Course Comparison**

Equivalency of UC Davis Calculus for Biology and Medicine (MAT 17C) and (enter your college here + course name and number)

Textbook used for (college name) course:

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**ISBN:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **UC Davis MAT 17C Sections** | **(enter your college + course name and number) Sections** |
| 10.1-2 Functions of two/several variables; Limits, continuity – briefly |  |
| 10.3 Partial derivatives |  |
| 10.4 Tangent planes and linearization; Differentiability (briefly) |  |
| 10.5 Chain rule (include discussion about parameterize curves); Optional: Implicit differentiation |  |
| 10.5 Directional derivatives and gradient vector |  |
| 10.6 Maxima and minima (local and global); Applications |  |
| Optional: Optimization with constraints (10.6.2) and/or Diffusion equation (10.6.3) |  |
| Online Notes: Double integrals and applications |  |
| 11.1-2 Linear systems of ODEs: Theory, modeling and examples |  |
| 11.3-4 + Online Notes  Nonlinear systems of ODEs: Theory, modeling and examples |  |
| Optional: Systems of difference equations (10.7) |  |
| 12.1 Counting: Permutations and combinations; Biological examples. |  |
| 12.2 Basic probability: definitions and examples |  |
| 12.3 Conditional probability; Law of total probability |  |
| 12.3 Independence; Bayes Formula; Applications in biology. |  |
| Optional: More complicated problems using Bayes formula and conditional probability or distributions of discrete random variables (12.4) |  |