## Tentative Schedule of Topics, Presentations and Examinations

| Date | | | Topic |
|---|---|---|---|
| W | Jan | 19 | *n*-Dimensional Euclidean Space |
| F | Jan | 21 | Spans, lines and planes |
| M | Jan | 24 | Dot product and Euclidean norm |
| W | Jan | 26 | Orthogonality and projections |
| F | Jan | 28 | The cross product |
| M | Jan | 31 | Functions on Euclidean space |
| W | Feb | 2 | Open subsets of Euclidean space |
| F | Feb | 4 | Continuous functions |
| M | Feb | 7 | Continuous functions (continued) |
| W | Feb | 9 | Limits and continuity |
| F | Feb | 11 | Differentiability |
| M | Feb | 14 | The derivative map |
| W | Feb | 16 | The derivative map (continued) |
| F | Feb | 18 | Sufficient conditions for differentiability |
| M | Feb | 21 | Sufficient conditions for differentiability (continued) |
| W | Feb | 23 | Derivatives of compositions |
| F | Feb | 25 | Derivatives of compositions (continued) |
| M | Feb | 28 | Problems |
| W | Mar | 2 | Review |
| F | Mar | 4 | **Exam 1** |
| M | Mar | 7 | Path integrals |
| W | Mar | 9 | Path integrals (continued) |
| F | Mar | 11 | Line integrals |
| M | Mar | 14 | *Spring Recess* |
| W | Mar | 16 | *Spring Recess* |
| F | Mar | 18 | *Spring Recess* |
| M | Mar | 21 | Gradient fields |
| W | Mar | 23 | Flux across plane curves |
| F | Mar | 25 | *Cesar Chavez Day* (observed) |
| M | Mar | 28 | Differential forms |
| W | Mar | 30 | Calculus of differential forms |
| F | Apr | 1 | Calculus of differential forms (continued) |
| M | Apr | 4 | Evaluating 2-forms: Double integrals |
| W | Apr | 6 | Green's Theorem |
| F | Apr | 8 | Fundamental Theorem of Calculus in two dimensions |

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| M | Apr | 11 | Change of variables Theorem |
| W | Apr | 13 | Change of variables Theorem (continued) |
| F | Apr | 15 | Triple integrals |
| M | Apr | 18 | Surface integrals |
| W | Apr | 20 | Surface integrals (continued) |
| F | Apr | 22 | Stokes' Theorem |
| M | Apr | 25 | Problems and examples |
| W | Apr | 27 | Review |
| F | Apr | 29 | **Exam 2** |
| M | May | 2 | Review |
| W | May | 4 | Review |
| Th | May | 12 | **Final Examination** |