

### MA 160 Elementary Applied Calculus Videotapes

The following videotapes support different topics found in MA 160. They directly correspond to material in *Calculus and Its Applications*, 5th ed., Goldstein, Lay and Schneider, Prentice Hall Publ., 1990. (Most section numbers are consistent with those found in the 6th edition.) All tapes are under 30 minutes in length.

<u>Tape #</u>	<u>Topic</u>
V160.01	Calculate the derivative of a function using the definition of the derivative.  Use both the prime and Leibniz's notations for the derivative.
V160.02	Use the Power Rule, the Constant Multiple Rule, and the Sum Rule for differentiation.  Use the Product Rule and the Quotient Rule for differentiation.
V160.03	Use the Generalized Power Rule for differentiation.
V160.04	Sketch the graph of a function, showing all relative extreme points and inflection points.
V160.05	Find the absolute extreme values of a continuous function on a closed interval.  Solve optimization problems using the derivative.
V160.06	Differentiate logarithmic and exponential functions.  Integrate functions using the Power, Sum, or Constant Multiple Rules for Integration.
V160.07	Integrate using logarithmic and exponential functions. Evaluate definite integrals. Find the area under the graph of a continuous function.
V160.08	Find the area between graphs of continuous functions. Integrate by substitution.

\*\*For more help on Trigonometry, also see VM.019 – “The Twisted World of Trigonometry – Part II.