### Learning Outcomes

*This is a sentence completion exercise.*

At the end of this course, the successful student will know and be able to:

1. Define, compute, and prove using a rigorous framework properties of the Riemann-Stieltjes integral of a real or vector valued function over a closed interval
2. Define, recognize, prove properties of, and use (for sequences and series of functions) the following: pointwise convergence, uniform convergence, pointwise and uniform boundedness, equicontinuity
3. State, recall the proof of, and use the Stone-Weierstrass Theorem
4. Assess convergence of power series to analytic functions and discuss special functions
5. Define and compute the derivative of multivariable vector valued functions and use partial derivatives to represent derivatives with respect to a particular basis
6. State, recall the proof of, and use the Inverse Function Theorem
7. State, recall the proof of, and use the Implicit Function Theorem
8. Recall and use the basic theory of linear operators

All of the above are relevant to D as well.

### Characteristics of a University of Windsor Graduate

A U of Windsor graduate will have the ability to demonstrate:

A. The acquisition, application and integration of knowledge

B. Extend the definitions, theorems, and techniques of analysis to prove results of moderate difficulty without being given a prescribed method of solution (relevant to G and H as well) and solve problems (relevant to C as well)

C. Critical thinking and problem-solving skills

D. Literacy and numeracy skills

E. Recognize, evaluate and construct logically sound arguments and deductions in analysis

F. Interpersonal and communications skills

G. Teamwork, and personal and group leadership skills
| **Learning Outcomes**  
*This is a sentence completion exercise.* | **Characteristics of a University of Windsor Graduate** |
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<td>At the end of this course, the successful student will know and be able to:</td>
<td>A U of Windsor graduate will have the ability to demonstrate:</td>
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<td>H. recognize and discuss how natural, classical questions and theories in analysis may be abstracted, generalized, and extended (relevant to I as well)</td>
<td>H. creativity and aesthetic appreciation</td>
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<td>I. apply their foundation in analysis to further studies</td>
<td>I. the ability and desire for continuous learning</td>
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