

## Analytical Skills Assessment Matrix

Program: PhD, CAMA

Date: \_\_\_\_\_

Student: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Topic	Unsatisfactory (0)	Satisfactory (1)	Excellent (2)	Points
Content Area Knowledge	The student has been exposed to and can remember concepts and methods of advanced mathematical analysis, but cannot demonstrate understanding.	The student can explain concepts and methods of advanced mathematical analysis, and can demonstrate understanding of these concepts and methods.	The student can explain advanced concepts and methods of advanced mathematical analysis, and can demonstrate in-depth understanding of these concepts and methods.	
Synthesis and Application	The student can minimally (or not at all) carry out proofs using the concepts and methods of advanced mathematical analysis.	The student can carry out routine proofs using the concepts and methods of advanced mathematical analysis.	The student can carry out proofs, using the concepts and methods advanced mathematical analysis in novel and creative ways.	
Communication	The student is unable to communicate effectively the ideas of advanced mathematical analysis in verbal and visual form.	The student is able to communicate effectively the ideas of advanced mathematical analysis in verbal and visual form.	The student is able to communicate the ideas of advanced mathematical analysis in verbal and visual form with exceptional clarity and persuasiveness.	
Total Points				

Total Score: 0-2 Inadequate, 3-4 Adequate, 5-6 Excellent  
Administer following: Ph.D. Candidacy Exam

REVIEWER COMMENTS:

## Computational Skills Assessment Matrix

Program: PhD, CAMA

Date: \_\_\_\_\_

Student: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Topic	Unsatisfactory (0)	Satisfactory (1)	Excellent (2)	Points
Content Area Knowledge	The student has been exposed to and may remember concepts and methods of computational mathematics, but cannot demonstrate understanding.	The student can explain concepts and methods of computational mathematics, and can demonstrate understanding of these concepts and methods.	The student can explain advanced concepts and methods of computational mathematics, and can demonstrate in-depth understanding of these concepts and methods.	
Synthesis and Application	The student can minimally (or not at all) carry out a solution using the concepts and methods of computational mathematics.	The student can carry out a routine solution using the concepts and methods of computational mathematics.	The student can carry out a computational solution, using the concepts and methods of computational mathematics in novel and creative ways.	
Communication	The student is unable to communicate effectively the ideas of computational mathematics in verbal and visual form.	The student is able to communicate effectively the ideas of computational mathematics in verbal and visual form.	The student is able to communicate the ideas of computational mathematics in verbal and visual form with exceptional clarity and persuasiveness.	
Total Points				

Total Score: 0-2 Inadequate, 3-4 Adequate, 5-6 Excellent  
Administer following: Ph.D. Candidacy Exam

REVIEWER COMMENTS:

## Modeling Skills Assessment Matrix

Program: PhD, CAMA

Date: \_\_\_\_\_

Student: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Topic	Unsatisfactory (0)	Satisfactory (1)	Excellent (2)	Points
Content Area Knowledge	The student has been exposed to and can remember concepts and methods of mathematical modeling, but cannot demonstrate understanding.	The student can explain concepts and methods of mathematical modeling, and can demonstrate understanding of these concepts and methods.	The student can explain advanced concepts and methods of mathematical modeling, and can demonstrate in-depth understanding of these concepts and methods.	
Synthesis and Application	The student can minimally (or not at all) apply the concepts and methods of mathematical modeling to a project of significant scope.	The student is able to apply the concepts and methods of mathematical modeling to a project of significant scope.	The student is able to apply the concepts and methods of mathematical modeling to a project of significant scope in novel and creative ways.	
Communication	The student is unable to communicate effectively the ideas of mathematical modeling in verbal and visual form.	The student is able to communicate effectively the ideas of mathematical modeling in verbal and visual form.	The student is able to communicate the ideas of mathematical modeling in verbal and visual form with exceptional clarity and persuasiveness.	
Total Points				

Total Score: 0-2 Inadequate, 3-4 Adequate, 5-6 Excellent  
Administer following: Candidacy Exams

REVIEWER COMMENTS: