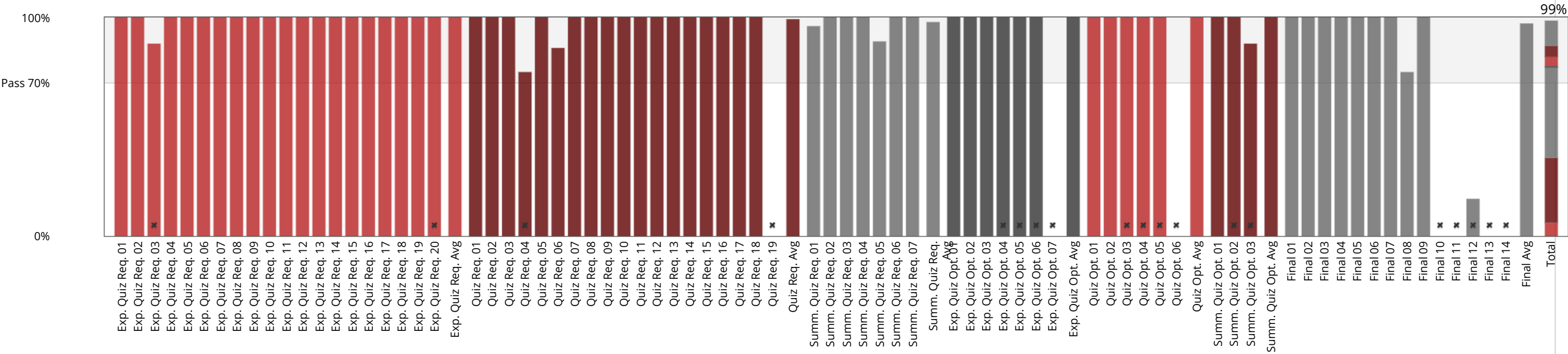


Course Progress for Student 'sandipan_dey' (sandipan.dey@gmail.com)

Your enrollment: Audit track
You are enrolled in the audit track for this course. The audit track does not include a certificate.



Section 0: Introduction and Course Orientation

1.1 Pre-Course Survey.

No problem scores in this section

1.2 Welcome to the Course

No problem scores in this section

1.3 Goals, Prerequisites and Getting Started (7/7) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1.4 Grading, Assignments and Schedule

No problem scores in this section

1.5 Course Policies

No problem scores in this section

1.6 Introduce yourself!

No problem scores in this section

1.7 Course Community.

No problem scores in this section

1.8 Help Forum for Section 0

No problem scores in this section

Section 1: What Makes a Good
Test Question? Mathematical
Models to Measure Knowledge
and Improve Learning

1.1 What Makes a Good Question? Introduction (8/8) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1.2 Modeling a Test Question (3/3) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1

1.3 Item Response Curves (7/8) 88%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 0/1 1/1

1.4 The Item Response Model and its Parameters (5/5) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1

1.5 Creating and Using Item Response Curves

No problem scores in this section

1.6 A Dynamic Model for Improving Learning in Education

No problem scores in this section

1.7 Summary Quiz: How the Parameters of Item Response Model Relate to Difficulty, Discrimination and Guessing (25/26) 96%

Summary Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 0/1 1/1 1/1 1/1
1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1.8 Help Forum for Section 1

No problem scores in this section

Section 2: Economic
Applications of Calculus:
Elasticity and A Tale of Two
Cities

1.1 A Tale of Two Cities: Public Transit Fares in New York and Boston (3/3) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1

1.2 Price and Demand (9/9) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 4/4 2/2 1/1 1/1

1.2 Price and Demand Part 2 (6/6) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 2/2 1/1

1.3 Measuring What Matters: Price Elasticity of Demand (9/9) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 3/3 1/1 1/1 1/1

1.4 Price Elasticity of Demand: A Calculus Viewpoint (4/4) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1

1.4 Continued (3/4) 75%

Quiz (Required Sections)

Problem Scores: 1/1 0/1 1/1 1/1

1.5 A Tale of Two Cities, Revisited

No problem scores in this section

1.6 Elasticity and Maximizing Revenue (3/3) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1

1.6 Part 2 (3/3) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1

1.7 Summary Quiz - A little more about math and economics from Kiran Gajwani (8/8) 100%

Summary Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1.8 Help Forum for Section 2

No problem scores in this section

Section 3: From X-rays to CT scans: Mathematics and Medical Imaging

1.1 Medical Imaging in a Real Patient's Case (3/3) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1

1.2 What is an x-ray? (2/2) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1

1.2.4 Quiz part 2 (6/7) 86%

Quiz (Required Sections)

Problem Scores: 1/1 0/1 1/1 1/1 1/1 1/1 1/1

1.3 A Mathematical Model for an X-Ray (2/2) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1

1.4 X-Rays through a Non-Uniform Material (5/5) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 3/3

1.4.4 Exploratory Quiz (4/4) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1

1.5 Finding the Attenuation Function from Many Views (4/4) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 2/2 2/2

1.6 CT Scans: What They Can Reveal in a Real Patient's Case

No problem scores in this section

1.7 Summary Quiz: From X-rays to CT-scans (13/13) 100%

Summary Quiz (Required Sections)

Problem Scores: 1/1 2/2 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1.8 Additional Resources

No problem scores in this section

1.9 Help Forum for Section 3

No problem scores in this section

Section 4: What is Middle

Income? Thinking about Income Distributions with Statistics and Calculus

1.1 What is Middle Income? Looking at Income Distributions (5/5) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1

1.2 Looking at Income Distributions: Frequency and Relative Frequency Histograms (7/7) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1.3 What is Middle Income? Mean, Median and Beyond (7/7) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1.4 From Histogram of Data to Continuous Model: Probability Density Functions (7/7) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1.5 Using Integration to Estimate Households in Middle Income Range (10/10) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 6/6 1/1 1/1 1/1 1/1

1.6 What is Middle Income? Mean and Median for the Continuous Model

No problem scores in this section

1.7 Optional Video: A Little More from Nina about Statistics in her work

No problem scores in this section

1.8 Summary Quiz (14/14) 100%

Summary Quiz (Required Sections)

Problem Scores: 1/1 1/1 4/4 1/1 1/1 1/1 2/2 1/1 1/1 1/1

1.9 Help Forum for Section 4

No problem scores in this section

Section 5: Population Dynamics
Part I: the Evolution of
Population Models

1.1 Introduction to Population Models (7/7) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 2/2 1/1 1/1 1/1

1.2 Limits on Growth: Verhulst's Model (8/8) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1.3 Species Interact: D'Ancona's Puzzle and Volterra's Predator-Prey Model (8/8) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 5/5

1.4 Volterra's Model in Action: Marlin and Sardines (10/10) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 2/2 2/2 2/2 1/1 1/1

1.5 How Populations Change in a Predator-Prey System (5/5) 100%

Quiz (Required Sections)

Problem Scores: 4/4 1/1

1.6 Summary Quiz: Population Models (8/9) 89%

Summary Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 0/1 5/5

1.7 Help Forum for Section 5-6

No problem scores in this section

Section 6: Population Dynamics
II: A Biological Puzzle OR How
Fishing Affects a Predator-Prey
System

2.1 Introduction to the Biological Puzzle

No problem scores in this section

2.2 The Average Value of Populations in a Predator-Prey System (2/2) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1

2.2.5 & 2.2.6 (1/1) 100%

Quiz (Required Sections)

Problem Scores: 1/1

2.3 The Effect of Fishing on the Predator-Prey System (9/9) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 2/2 2/2 2/2 1/1 1/1 1/1

2.4 D'Ancona's Puzzle Again and Implications for Fishing Regulations

No problem scores in this section

2.5 Making a Good Model: Issues and Limitations (Optional) (1/1) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1

2.6 Summary Quiz (16/16) 100%

Summary Quiz (Required Sections)

Problem Scores: 1/1 1/1 2/2 1/1 1/1 1/1 5/5 1/1 1/1 1/1 1/1

2.7 Help Forum for Section 6

No problem scores in this section

Section 7: Bifurcation Part I:
Extinction, Chaos and other
Bifurcation Behavior

1.1 What is a Bifurcation? Introduction (3/3) 100%

Exploratory Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1

1.1 Continued (7/7) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 5/5

1.2 Modeling Fish Populations

No problem scores in this section

1.2 Continued (5/5) 100%

Quiz (Required Sections)

Problem Scores: 2/2 1/1 1/1 1/1

1.3 Survival or Extinction: The Effect of Harvesting on Fish Population (18/18) 100%

Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 7/7 1/1 1/1 1/1 1/1 1/1 1/1

1.4 Summary Quiz: Bifurcations and Fishing (18/18) 100%

Summary Quiz (Required Sections)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 7/7 1/1 1/1 1/1

1.5 Mathematics and Biology: A Symbiotic Relationship

No problem scores in this section

Help Forum for Section 7

No problem scores in this section

Optional Sections (CHOOSE 1 of 3)

Optional Sections

No problem scores in this section

Section 8: Bifurcation Part II:
Outbreak! Budworm
Populations and Bifurcations
(OPTIONAL)

1.1 Introduction to the Budworm Model (4/4) 100%

Exploratory Quiz (Optional Section)

Problem Scores: 1/1 1/1 1/1 1/1

1.2 Modifying the Budworm Model to include Predation (8/8) 100%

Quiz (Optional Section)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1

1.3 Equilibrium Points and Carrying Capacity (2/2) 100%

Exploratory Quiz (Optional Section)

Problem Scores: 1/1 1/1

1.4 Increasing the Carrying Capacity Further (6/6) 100%

Quiz (Optional Section)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1

1.5 Summary Quiz: Budworm Population Outbreaks (14/14) 100%

Summary Quiz (Optional Section)

Problem Scores: 1/1 1/1 2/2 1/1 1/1 1/1 1/1 2/2 1/1 1/1 1/1 1/1

1.6 Summary

No problem scores in this section

Help Forum for Section 8

No problem scores in this section

Section 9: Bifurcation Part III:
Species in Competition:
Coexistence or Exclusion
(OPTIONAL)

1.1 A Model of Species in Competition (6/6) 100%

Exploratory Quiz (Optional Section)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1

1.2 How Weak Competition Affects the System (4/4) 100%

Quiz (Optional Section)

Problem Scores: 1/1 1/1 1/1 1/1

1.3 How Strong Competition Affects the System (3/3) 100%

Exploratory Quiz (Optional Section)

Problem Scores: 1/1 1/1 1/1

1.4 The Bifurcation Value and Competition in Economic Systems

No problem scores in this section

1.5 Summary Quiz: Species in Competition and Bifurcation Values (14/14) 100%

Summary Quiz (Optional Section)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1 1/1

Help Forum for Section 9

No problem scores in this section

Section 10: $E = mc^2$: Taylor
Approximation and the Energy
Equation (OPTIONAL)

1.1 Introducing the Energy-Mass Equation (1/1) 100%

Exploratory Quiz (Optional Section)

Problem Scores: 1/1

1.2 Taylor Approximation for the Energy-Mass Equation (3/3) 100%

Quiz (Optional Section)

Problem Scores: 1/1 1/1 1/1

1.3 Making Sense of the First Few Terms of the Approximation (6/6) 100%

Quiz (Optional Section)

Problem Scores: 1/1 1/1 1/1 1/1 1/1 1/1

1.4 Higher Terms and Faster Speeds (1/1) 100%

Exploratory Quiz (Optional Section)

Problem Scores: 1/1

1.5 String Theory, the Energy Equation and a Physicist's Dream

No problem scores in this section

1.6 Summary Quiz: E = mc²: Taylor Approximation and the Energy Equation (7/8) 88%

Summary Quiz (Optional Section)

Problem Scores: 1/1 1/1 1/1 0/1 1/1 1/1 1/1 1/1

1.7 Additional Resources

No problem scores in this section

1.8 Help Forum for Section 10

No problem scores in this section

Section 11: Final Assessment

Video: In Closing... and final assessment

No problem scores in this section

Final Assessment Instructions and Part I (1/1) 100%

Final Assessment

Problem Scores: 1/1

Final Assessment Part II: Self-Review Practice and Instructions

Practice Scores: 0/0

Help Forum for Final Assessments

No problem scores in this section

Final Assessment Part II; Option I: Physics: Pondering a Pendulum (CHOOSE ONE)

Final Assessment Option 1: Physics Pondering a Pendulum (3/3) 100%

Final Assessment

Problem Scores: 1/1 1/1 1/1

2.0 Model of Pendulum Motion (4/4) 100%

Final Assessment

Problem Scores: 1/1 1/1 1/1 1/1

3.0 Qualitative Analysis of the Linearized Model (14/14) 100%

Final Assessment

Problem Scores: 1/1 1/1 4/4 4/4 1/1 1/1 1/1 1/1

4.0 Solving the Simplified Pendulum Model (5/5) 100%

Final Assessment

Problem Scores: 1/1 1/1 1/1 1/1 1/1

5.0 How does gravity or pendulum weight and length affect the period? (4/4) 100%

Final Assessment

Problem Scores: 1/1 1/1 1/1 1/1

6.0 Summary Quiz (4/4) 100%

Final Assessment

Problem Scores: 1/1 1/1 1/1 1/1

6.2 Summary Quiz Part II: Self Assessment (3/4) 75%

Final Assessment

Problem Scores: 3/4

6.3 Summary Quiz Part III: What Happens in the Original System for the Pendulum? (1/1) 100%

Final Assessment

Problem Scores: 1/1

Final Assessment Part II; Option II: Climate (CHOOSE ONE)

1.0 Introduction and Intuition

No problem scores in this section

2.0 Modeling Temperature Change

No problem scores in this section

3.0 Exploratory Quiz (0/5)

Final Assessment

Problem Scores: 0/1 0/1 0/1 0/1 0/1

3.1 Quiz: Making Sense of the Model (0/3)

Final Assessment

Problem Scores: 0/1 0/1 0/1

4.0 What is the Effect of Albedo on Temperature in the Long Run? - 5.0 Making A More Realistic Model: The Temperature-Albedo Interaction (1/6) 17%

Final Assessment

Problem Scores: 0/1 1/1 0/1 0/1 0/1 0/1

6.0 Summary Quiz (0/7)

Final Assessment

Problem Scores: 0/1 0/1 0/1 0/1 0/1 0/1 0/1

6.2 Self-Assessment (0/4)

Final Assessment

Problem Scores: 0/4

Section 12: Course Wrap Up

End of Course Survey and Feedback Forum

No problem scores in this section

Acknowledgements

Acknowledgements and Special Thanks

No problem scores in this section

Section