# BCB744 Biostatistics Exam – Assessment Template

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Student information			
Student Name:			
• Student ID:			
I. Task-by-Task Assessment & Scoring			
Task 1: Initial Processing (Weight: 10%)			
Components:			
• 1.1: Reading NetCDF			
• 1.2: Restructuring Data			
Scoring Scheme (per component):			
• Correct output shown: assign 100			
• Penalty: Incorrect variable naming (max -30):			
• Penalty: Poor presentation or formatting (max -20):			
Гask Summary:			
• Average Task 1 Raw Score (0-100):			
• Task 1 Weighted Score (/10):			
• Final Task 1 Score (× 0.10):			
Narrative Feedback (Task 1):			

### Task 2: Exploratory Data Analysis (Weight: 10%)

#### **Component 2.1: Weighted Mean Time Series (Two Parts)**

•	(1) Correct summary plot for weighted mean time series: <b>assign 35</b>
	- Penalty: Missing year × quarter aggregation (max -10):
	- Penalty: No exclusion of passes = 0 or area = NA (max -10):
	- Plot correctness: assign 15
	- Penalty: Poor formatting (max -10):
•	(2) Correct pixel-level temporal analysis: <b>assign 35</b>
	- Penalty: Fewer than 100 samples (max -10):
	- Penalty: Missing year × quarter × pixel structure (max -10):
	- Plot correctness: assign 15
	- Penalty: Poor formatting (max -10):
Comp	onent 2.1 Score (0–100):
Comp	onent 2.2: Summary Statistics & Visualisations
•	(1) Statistical summaries: <b>assign 50</b>
	- Penalty: Incorrect grouping (max -15):
	- Interpretation quality: (max 20):
•	(2) Plotting: assign 30
	- Penalty: Poor formatting (max -20):
Comp	onent 2.2 Score (0-100):
Comp	onent 2.3: Observation Density Map
• ]	Plot correctness: <b>assign 100</b> - Penalty: Poor formatting (max -50):
Comp	onent 2.3 Score (0–100):
Task S	Summary:
• 1	Average Task 2 Raw Score (0-100):

• Task 2 Weighted Score (/10):	
• Final Task 2 Score (× 0.10):	
Narrative Feedback (Task 2):	
Task 3: Inferential Statistics – Part I (Weight: 20%)	
Components:	
• 3.1: Hypothesis Structure: Raw Score:	
• 3.2: Model Choice & Implementation: Raw Score:  - Penalty: Overcomplication not justified (e.g., unmotivated LMMs)	:_
• 3.3: Justification & Assumptions: Raw Score:	
• 3.4: Interpretation & Presentation: Raw Score:  - Penalty: Poor writing or code/text blending:	
Task Summary:	
• Average Task 3 Raw Score (0-100):	
• Final Task 3 Score (× 0.20):	
Narrative Feedback (Task 3):	
Task 4: Assigning Kelp Observations (Weight: 20%)	
Components:	
• 4.1: Coastal Sections Assignment (70% of Task 4): Raw Score:	_
• 4.2: Biogeographical Provinces Assignment (30%): Raw Score:	
Weighted Average Task 4 Score:	
• ( 4.1 ×0.70 + 4.2 ×0.30 ):	
Final Task 4 Score (× 0.20):	
Narrative Feedback (Task 4):	

## Task 5: Inferential Statistics – Part II (Weight: 30%)

<ul> <li>5.1: Section-wise Differences: Raw Score:</li> <li>Bonus: TukeyHSD (+5):</li> </ul>
- bolius. Tukeyfi3D (+3)
- Penalty: Overcomplicated method (e.g., unmotivated LMM):
• 5.2: Province-wise Differences: Raw Score:
- Bonus: TukeyHSD (+5):
- Penalty: Overcomplicated method:
<ul> <li>5.3: Interaction (Section × Province): Raw Score:</li> <li>Penalty: Overcomplicated method:</li> </ul>
<ul> <li>5.4: Temporal Trend by Province: Raw Score:</li> <li>Penalty: Overcomplicated method:</li> </ul>
<ul> <li>5.5: Seasonal Variability across Provinces: Raw Score:</li> <li>Penalty: Overcomplicated method:</li> </ul>
Task Summary:
• Average Task 5 Raw Score (0-100):
• Final Task 5 Score (× 0.30):
Narrative Feedback (Task 5):
Task 6: Final Write-up (Weight: 10%)
Scoring Scheme:
• Clarity & Communication (report organisation, flow, language):/70
• Critical Thinking (limitations, implications, insight):/30
• <b>Penalty:</b> AI-generated text (-50%) or similar issues:
Total Task 6 Score (after deductions): Final Task 6 Score (× 0.10):
Narrative Feedback (Task 6):

## II. Final Mark Calculation

Task	Weighted Score
Task 1	/ 10
Task 2	/ 10
Task 3	/ 20
Task 4	/ 20
Task 5	/ 30
Task 6	/ 10
Subtotal	/ 100

Globa	l Pena	lties
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• Formatting / Document Structure (-0 to -15%):
• Excess Output (-0 to -15%): - Reason:
Total Global Penalty (%): (max 40%)
Final Exam Mark: %
> Calculation: Subtotal × (1 - Penalty % / 100)
III. Assessor Summary & Recommendations  • Strengths:
• Weaknesses:
Recommendations for Improvement: