**Framework for a teaching program**

|  |  |
| --- | --- |
| **Theme** | Hazards |
| **Topic** | Natural Hazards |
| **Concepts** | **Primary**: Environment, Scale | **Secondary**: Place, Sustainability |
| **Focus** | Natural Hazards in Australia |
| **Suggested, but not exclusive, teaching and learning activities and assessment tasks****Aligns with LAP 04** |
| **Concepts and Content** | **Assessment**  |
| 1. Types and characteristics of hazards
* Types of natural hazards found in Australia
* Distribution of these natural hazards nationally and globally (*scale*)
	+ analysis of the patterns – similarities and differences
* Characteristics of these hazards and how they might vary across the world (*environment*)
	+ for example: tropical cyclones in Australia / hurricanes in USA
* Causes of the hazards
 | **AT1: Geographical Skills and Applications Task**Create an infographic about a particular type of natural hazard which affects Australia. The Infographic should address: * characteristics of the hazard;
* causes of the hazard;
* distribution and vulnerability of the hazard, nationally and globally;
* examples of risk management of the particular hazard;
* examples of impacts and responses to the particular hazard events of this type.

An infographic must be graphical with appropriate annotations and descriptions.**500 words** |
| 1. Impacts of hazard events
* Social, economic and environmental impacts of hazard events (*sustainability*)
* Why, and in what ways, are people impacted differently by hazards
 |
| 1. Understanding and managing hazard risk
* What is hazard vulnerability?
* Why, and in what ways, is vulnerability and hazard risk different between locations (*place*)
	+ why do people live in hazardous environments?
* How do people manage hazards?
	+ prevention, preparation, response, recovery
	+ why are there different responses to hazards?
 |  |
| 1. Case Study: Fire Management in the Adelaide Hills
* What are the environmental features of the Adelaide Hills / chosen conservation park? (*environment*)
	+ Topography; climate conditions; fuel load
* Why is the Adelaide Hills vulnerable to bushfires?
	+ Environment, people
* Prevention of bushfire hazards
	+ Identifying areas of risk by calculating fuel load
	+ Management strategies in place, are they sustainable?
 | **AT1: Geographical Skills and Applications Task See assessment task exemplar 3**Create a Fire Risk Map using a GIS platform (e.g. Google My Map, ArcGIS online, Spatial Genie) which identifies fire hazards and assesses the fuel load in the chosen area of study.* Measure and collect field data for a Fire Fuel Hazard assessment (from class field trip to a conservation park).
* Record data in a spreadsheet and then uploaded to a GIS platform.

Use spatial data analysis techniques to manipulate the data in order to identify the areas with highest risk to future bushfires.Written report explaining the locations with greatest fire risk.**500 words** |