



**Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore**  
**Shri Vaishnav Institute of Agriculture**  
**B.Sc. (Hons) Agriculture**  
**Generic Elective Course (As per New Education Policy)**

Course Code	Course Name	Teaching & Evaluation Scheme							
		Theory			Practical		L	P	Credits
		End Sem University Exam	Two Term Exam*	Teachers Assessment*	End Sem University Exam	Teachers Assessment*			
AGGE 103	Fundamentals of Soil Science	50	30	00	15	05	2	1	3

**Unit-1:** Soil as a natural body, Pedological and edaphological; soil forming rocks and minerals; weathering, processes and factors of soil formation; Soil profile, components of soil; Soil physical properties: soil-texture, structure, density and porosity, soil colour.

**Unit-2:** Elementary knowledge of soil taxonomy classification and soils of India, Soil air, composition, gaseous exchange, problem and plant growth, Soil temperature

**Unit-3:** Soil reaction –pH, soil acidity and alkalinity, buffering, effect of pH on nutrient availability; soil colloids – inorganic and organic, cation exchange capacity

**Unit-4:** Soil organic matter: composition, properties and its influence on soil properties, soil organism: macro and microorganisms, their beneficial and harmful effects.

**Unit-5:** Soil pollution –behavior of pesticides and inorganic contaminants, prevention and mitigation of soil pollution.

### Practical

- Collection of soil sample, its processing and storage.
- Determination of soil density
- Determination of soil moisture content
- Determination of soil porosity.
- Determination of soil pH and electrical conductivity.
- Determination of soil colour
- Estimation of organic matter content of soil.

(Prof. Vinod Dhar)

Coordinator SVIAG SWV indore