

SAVITRIBAI PHULE PUNE UNIVERSITY

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce College, Baramati
(Autonomous)

Course Work for Ph.D. Programme

As per guidelines of Savitribai Phule Pune University, Credit Requirements, number, duration, syllabus, minimum standards for completion, etc. for Ph.D. programme shall be as under:

Ph.D. course work shall be of 16 credits + 02 Credits of Research and Publication Ethics (RPE) proposed by UGC.

The course work shall be treated as **prerequisite** for **Ph.D. programme**.

The **Ph. D. Course work** shall consist of the following components, namely :

Course - 1 : Research Methodology : 4 credits (Including Quantitative methods, Computer applications, research ethics and review of published research in the relevant field, training, field work, etc).

Course - 2 : Writing of Research Proposal for obtaining financial assistance from national funding agencies : **1 credit**

Writing of Review : **1 credit**

Seminars : **2 credits**

Subject specific advanced level courses : 8 credits

Course - 3 : Advances in Botany-I : 4 credits

- Plant-animal and plants-microbes interaction
- Biodiversity: genetic, species, molecular diversity and taxonomy, DNA bar coding, population genetics, conservation of biodiversity and endangered species, Evolution.

- Climate change and carbon sequestration
- Algal Biofuels
- Remediation of degraded/contaminated ecosystem by plants microbes
- Recent nomenclature of Plants

Course - 4 : Advances in Botany-II : 4 credits

- Advanced in plant science w.r.t. secondary metabolite production
- Genetically modified plants for improved tolerance to biotic abiotic stress
- Molecular generics of plant development
- Mechanism of plant hormone action
- Signal transduction in plants

Course – 5 : Research and Publication Ethics (RPE) : 2 Credits

Theory (1 Credit)

RPE 01 : Philosophy and Ethics

RPE 02 : Scientific Conduct

RPE 03 : Pblication Ethics

Practice (1 Credit)

RPE 04 : Open Access Publishing

RPE 05 : Publication Misconduct

RPE 06 : Databases and Research Metrics
