

# **Yuvashakti Arts and Science College, Amravati.**

## **Program Outcomes (POs) Course Outcomes (COs)**

### **Programme Outcomes : (Undergraduate Level)Faculty Arts**

#### **After completing the graduation in the faculty of Arts the students have:**

- Acquired the knowledge with facts and figures concerned with the subjects such as History, Geography, Economics, Languages, etc.
- Understood the basic concepts, fundamental principles, and various theories in the above mentioned subjects.
- Realized the importance of literature in terms of aesthetic, mental, moral, intellectual development of an individual and accordingly of the society.
- Understood how issues in the social science get influenced by the literature and how the literature can provide solutions to the social issues.

### **Faculty of Arts: Subjects**

#### **Compulsory English**

#### **Cos:-**

1. Understand the basic knowledge of English language and literature
2. Understand the relation between literature and real life.
3. Understand and interpret the prose, poem, short stories
4. Write the News Report, Letter, Essay, Paragraph etc.
5. Avail the pleasure of literary forms such as Novel, Poem, Play etc.
6. Develop interview technique, Reading Skills, Writing Skills and Speaking Skills.
7. Enhance the interest in English Language.

#### **Semester – I**

#### **COs :**

- i) Communicate effectively in different real life situations.
- ii) Register complaints, make enquiries and give opinions.
- iii) Make proper self introduction.
- iv) Respond well to questions at an interview.

## **Semester – II**

1. Comprehend various forms of literature like Prose, Poetry, Drama and Fiction
2. Develop the knowledge of grammatical system
3. Develop four language skills LSRW
4. Widen scope of employability and Entrepreneurship viz Teaching, Civil Services and Creative Writing

## **MARATHI**

The Outcomes of UG Course, B. A. in Marathi

At the completion of B. A. in Marathi the students are able to:

Develop competency in Literary Forms. ( i.e. Marathi poetry, autobiography, novel, short story, drama & performing prose)

Develop Reading, Writing & Communication Skills in

Marathi. Get Information about the history of Saint

Literature.

Get Information about Literary Theories.

Get Information about the history of MODERN Marathi Literature.

Apply the study of Marathi Linguistics & Grammar in their practical

life. Study News Writing for Media.

Nurture themselves in soft skills and develop research

aptitude. Find jobs for their livelihood

Be motivated for their further education.

## **English Literature**

### **POs**

1. Understand Literary Movements that existed in different ages.
2. Define Literary Theories and Terms in Criticism.
3. Develop reading, writing and analytical skills.
4. Communicate their ideas critically and creatively.

## **Semester – I English Literature**

### **Cos:**

1. Analyse various forms of literature.
2. Acquaint them with the forms of structures and aesthetics of style and techniques of literary works.
3. Analyse various elements of literature.
4. Communicate in English orally and in writing.
5. Kindle their critical thinking skills.

## **Semester – II**

1. Understand Literary Movements that existed in different ages.
2. Define Literary Theories and Terms in Criticism.
3. Develop reading, writing and analytical skills.
4. Communicate their ideas critically and creatively.

### **(Soft Skills)**

1. Understand various soft skills.
2. Avail the pleasure of reading English short stories.
3. Use soft skills in day to day life.
4. Communicate in English orally and in writing.

## **Geography**

### **POs :**

1. To impart requisite skills and knowledge to be employed as Teachers, Surveyors, Cartographers, etc.
2. To make the understand basic Geographical knowledge of India and the world required to appear in various competitive exams and serve as state M.P.S.C., U.P.S.C., and staff selection commission.
3. To impart Geographical Knowledge to the students.
4. To develop understanding of Environment and Sustainable development.

## **Philosophy**

### **POs:**

1. To develop the insight among students about Fundamentals of Indian and Western Philosophy
2. To create an interest among the students about various Indian and Western Schools.
3. To classify between Indian and Western Philosophical thoughts.
4. To inculcate and develop Ethical Values among the students
5. To apply the various Moral Values in day to day life.
6. To analyze the moral thoughts of Contemporary Indian Saints.

## **Political Science**

POs:

- 1: Understanding of constitution, government institutions, electoral processes and policies.
- 2: Knowledge of some of the philosophical underpinnings of modern politics and government.
- 3: Develop the ability to make logical inferences about social and political issues on the basis of comparative and historical knowledge.
- 4: Knowledge of key theories and concepts, political thoughts, organization, and modern issues in international relations.
- 5: Develop the analytical abilities, observational skills and decision making abilities of the students so that they will be able to face different challenges of life.
- 6: Equip students with the concepts, principles, theories and processes studied in Political Science, so as to facilitate their career choices and employment.
- 7: Aim at shaping the students' perception and outlook on social, economic and political environment of India and beyond.

## **Sociology**

POs :

1. Sociology has great potential for the development of society.
- 2 . The program is useful in inculcating a sociological view of society.
- 3 . Student will know about Applied Sociology.
- 4 .Student will understanding and explain basic concepts of Sociology.
- 5 . This course provides students with the necessary information regarding Government and Non Government job opportunities..
6. This programme seeks to inculcate a humanist attitude among the students.
7. This program helps students to do their duties towards family, society and country

## **Home Economics**

POs

After successfully completion of UG course in Home Economics student will be able to

- 1 Describe the home management process and apply it in practice for planning and executing inside and outside the home

2 Play model role as a home maker, home manager, home Scientist, counselor as well as play a different role in different kinds.

3 Build Confidence to create her own business and adjust in it better way.

4 Derive certain changes in behavior and attitudes that require for effective communication and as a Entrepreneur.

coaching Centre, hobby Centre, child care, catering and health care). Thus, Home-Economics is an emerging academic discipline which has ample opportunities of technologies for conservation and is a unique discipline with a blend of science and art. And a very useful application of these knowledge by learning community is play favorable role in family life cycle effectively and try to make responsible citizen doing extension activities and community services.

## **Program Outcomes: (Undergraduate Level) Faculty- Science**

### **At the graduation in science faculty a student have:**

- Acquired the knowledge with facts and figures related to various subjects in pure sciences such as Physics, Chemistry, Botany, Zoology, Mathematics, etc.
- Understood the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life.
- Acquired the skills in handling scientific instruments, planning and performing in laboratory experiments
- The skills of observations and drawing logical inferences from the scientific experiments.
- Analyzed the given scientific data critically and systematically and the ability to draw the objective conclusions.
- Been able to think creatively (divergently and convergent) to propose novel ideas in explaining facts and figures or providing new solution to the problems.
- Realized how developments in any science subject helps in the development of other science subjects and vice-versa and how interdisciplinary approach helps in providing better solutions and new ideas for the sustainable developments.
- Developed scientific outlook not only with respect to science subjects but also in all aspects related to life.
- Realized that knowledge of subjects in other faculties such as humanities, performing arts, social sciences etc. can have greatly and effectively influence which inspires in evolving new scientific theories and inventions.

- Imbibe ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.

Developed various communication skills such as reading, listening, speaking, etc., which will help in expressing ideas and views clearly and effectively.

Realized that pursuit of knowledge is a lifelong activity and in combination with untiring efforts and positive attitude and other necessary qualities leads towards a successful life.

- Developed flair by participating in various social and cultural activities voluntarily, in order to spread knowledge, creating awareness about the social evils, blind faith, etc.

## **Chemistry**

### **POs:**

Upon completion of the programme successfully, the learners would be able to

1. Understand the scope, methodology and application of modern chemistry.
2. Apply theoretical and practical concepts of instruments that are commonly used in most chemistry fields.
3. Plan and conduct scientific experiments and record the results of such experiments.
4. Get acquainted with safety of chemicals, transfer, and measurements of chemicals, preparation of solutions, and using physical properties to identify compounds and chemical reactions.
5. Describe how chemistry is useful to solve social, economic and environmental problems and issues facing our society in energy, medicine, and health.
6. Apply the concepts from advanced mathematics to solve the derivation of different chemical formulae.

## **Biotechnology**

### **POs:**

Upon completion of the programme successfully, students would be able to

1. understand the structures and purposes of prokaryotic and eukaryotic cells.
2. understand the structures and purposes of basic components of cell.
3. understand the cellular components underlying mitotic cell division.
4. apply their knowledge of cell biology in cell function.
5. understand the structure and function of various cell organelles
6. understand the basics of Cell organization, Cell communication and Cell transport.
7. understand the cellular components underlying cell division and cell cycle.
8. describe the properties of some important biomolecules.

## **Botany**

### **POs:**

Upon completion of the programme successfully, students would be able to

1. Identify major groups of plants and compare the characteristics of lower ( microbes, algae ,fungi, bryophytes and pteridophytes) and higher ( Gymnosperms and angiosperms).
2. use evidence based comparative botany approach to explain the evolution of organism and understand the genetic diversity.
3. explain various plant processes and functions, metabolism, concepts of gene, genome and how organism's function is influenced at the cell, tissue and organ level.
4. understand adaptation, development and behavior of different forms of life.
5. demonstrate the experimental techniques and methods of their area of specialization in
6. Demonstrate the structural details of viruses and bacteria included in practical work.
7. Evaluate the plant diseases of local plants and diagnosed the diseases on the basis of symptology

## **Computer Science**

### **POs**

After completion of graduation, students will be competent to:

1. At the end of this program, the students would be able to:
2. Understand the computer hardware and software.
3. use the knowledge of software installation.
4. Select modern computing tools and techniques for programming task.
5. Identify, analyze, formulate and develop computer-based solutions to meet desired needs within realistic constraints.
6. Develop databases and perform operations on them.
7. Identify research and development areas in multiple disciplines.
8. Design and develop the small web applications.

## **Environmental Science**

### **POs:**

Course Specific Outcomes Upon completion of the course (Environmental Science) successfully, students would be able to

1. Apply environment related technical skills for sustainability.
2. Develop the skills to identify Environmental problems.
3. Use the fundamentals of interdisciplinary subjects to solve environmental problems
4. Understand concept and components of environment, history and meaning and interdisciplinary nature of Environmental Science.
5. Identify sources, nature and effects of pollutants on global and local environment.
6. Perform procedure for qualitative and quantitative analysis of pollutants.
7. Assess the effects of pollutants and suggest the control and preventive measures for environment.
8. Apply the environmental conservation strategies.

### **Food Science**

#### **POs:**

Upon completion of the programme successfully, students would be able to

1. Gain insight of food science
2. Acquire the skill in the use and care of food
3. Perform basic laboratory
4. Understand the related subjects.
5. Acquainted with the basic chemistry of food
6. Classify food in different groups and explain its functions
7. Understand structures of atoms and molecules
8. Acquire the skills in the use and care of basic Food Science equipments.
9. Compare the functions and importance of various constituents of food in diet.

### **Compulsory English**

#### **Cos:**

1. To facilitate the learners in acquiring listening and speaking competence .
2. To assist the learners in independent language comprehension and production.
3. To make the students aware about the different communicative functions of English.
4. To improve skills and proficiency for being employed as teachers, state government employees, civil aviation, engineering and medico-related industry, defence, commerce and taxation sector.
5. To be able to speak, write, read and listen flawlessly in person and through the electronic mode in English.



6. To understand views of others, mediate contradictory views/ disagreements, reaching conclusion in groups / group discussions.
7. To understand and use basic skills of the English language for applying it in the job assigned / employment accepted / profession undertaken.

### **Course Specific Outcome :**

After completion of this course successfully, students would be able to

1. Understand nature and nuances of English Language used in prose lessons and poetic passages.
2. Apply the knowledge of English to communicate with others on personal, social, literary and interdisciplinary topics.
3. Compare the structure of English language to use LSRW.
4. Formulate the sentences as per situational requirement.
5. Differentiate between acceptable and unacceptable sentences in English.
6. Create appropriate, grammatically correct and acceptable sentences in English.
7. Develop general language proficiency through listening, speaking, reading and writing

### **Industrial Chemistry**

At the time of graduation, Students would be able to

1. Understand the scope, methodology and application of industrial chemistry.
2. Apply theoretical and practical concepts of instruments, which are commonly used in the field of industrial chemistry.
3. Plan and conduct scientific experiments and record the results of such experiments.
4. Get acquainted with heat and mass transfer, stoichiometry, unit operations, catalysis, fuels, fluid mechanics, unit processes and process equipments, chemicals manufacturing industries, pollution and management, safety, green chemistry, instrumental methods of chemical analysis etc.
5. Use industrial chemistry to solve social, economic and environmental problems and issues facing our society in energy, health etc.

### **Mathematics**

POs: At the end of the programme, graduates would be able to

1. Enhance the knowledge of student in all basic sciences.
2. Identify, formulate and develop solutions to computational challenges.
3. Develop scientific temper and think in a critical manner.
4. Build up progressive and successful career in academics, industry and society.
5. Develop students abilities and aptitudes to apply the mathematical ideas.

**Cos:**

1. Understand major concepts in all disciplines of Mathematics
2. Formulate and develop Mathematical arguments in a logical manner
3. Gain good knowledge and understanding in advanced Mathematics
4. Create an awareness of the impact of Mathematics on the environment, society and development outside the scientific community.
5. Create sensitivity towards environmental concerns and contribute in the development of nation

**Microbiology**

## PSOs:

Upon completion of the programme successfully, The students would be able to

1. Gain insight of Microbiology starting from history and fundamental knowledge about the microorganisms.
2. acquire the skill in the use and care of basic microbiological equipment and can perform basic laboratory procedures in microbiology.
3. be well-informative about the integral role of microorganisms and different branches of Microbiology.
4. Be acquainted with the basic concept of prokaryotes, their taxonomy, their differentiation from eukaryotes.

**Petrochemical Science**

## POs

By the end of this program, the learner would be able to

1. Understand the scope, methodology and application of modern Petrochemical Science.
2. Apply theoretical and practical concepts of instruments that are commonly used-in most Petrochemical Science field.
4. Plan and conduct scientific experiments and record the results of such experiments.
5. Get acquainted with safety of chemicals, transfer, and measurements of chemicals, preparation of solutions, and using physical properties to identity compounds and chemical reactions.
6. Describe how Petrochemical Science is useful to solve social, economic and environmental problem and issues facing our society in energy, medicine, and health.
7. Develop and design optimized operation for petroleum and petrochemical products and processes.

## **Physics**

### **POs:**

Upon completion of the Programme successfully, students would be able to

1. acquire a comprehensive knowledge and sound understanding of fundamentals of Physics.
2. Develop laboratory skills, enabling them to take measurement in a physics laboratory and analyze the measurements to draw valid conclusions.
3. Be prepared to acquire a range of general skills, to solve problems, to evaluate information, to use computers productively, to communicate with society effectively and learn independently.
4. Develop good oral and written scientific communication skill.

## **Zoology**

### **POs:**

At the time of graduation, Students will be able to

### **PSOs**

By the end of the programme, Students would be able to

1. Develop a deeper sense with respect to phylum Protozoa to Echinodermata relation to taxonomy, classification, body organization and general characteristics this strengthens students' capability in basic zoology.
2. grasp various the Systematic positions from Protozoa to Echinodermata their pathogenicity and its epidemiology.
3. describe unique characters and recognize life functions of Protozoa, Porifera, Coelenterate, Helminthes, Arthropoda, Annelida, Mollusca and Echinodermata. Improve ability and apply Knowledge of Nonchordates for its execution in Agriculture especially with the phylum Arthropoda.
4. Implement an extensive idea about economic and ecological significance of various non-chordates phylum's in human life.