



Since 1881

THE AMERICAN COLLEGE

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2nd Cycle) by NAAC with Grade "A" CGPA – 3 .46 on a 4 - point scale

MADURAI - 625002

SSR Cycle – 3

Criterion I – Curricular Aspects

1.1. Curriculum Design and Development

Programme Specific Outcomes (PSOs) – Postgraduate Programmes

Department of English

Programme Specific Outcomes (PSOs) – M. A. English

On completion of the programme, postgraduates will be able to

1. Approach a wide range of literary texts and critical perspectives in English with an open mind; and contextually locate, critically evaluate, and creatively synthesize large amounts of ideologically conflicting information, concepts and theories;
2. Negotiate the social, environmental and global implications of English studies;
3. Recognize the ethical implications of reading literary texts; and interpret literary texts within and beyond the theoretical framework offered by various literary critical theories;
4. Diligently identify and objectively assess the relative merits, values and ways of life and cross cutting issues relating to gender, environment, equality and human rights through national and regional literatures;
5. Write well-organized and well-developed text-based essays in standard English with clear thesis statement at the discourse level and with the topic sentence together with supportive ideas at the paragraph level;
6. Dispassionately evaluate the secondary sources and synthesize them with their original responses to literary texts; and demonstrate their capacity for critical reading of texts;

7. Analyze Modern English both synchronically and diachronically; and teach and research on English as a second language;
8. Participate as critical and active citizens in society and at work; and pursue career and research in English studies and allied disciplines;
9. Document their reading and interpretive practices in assignments, translation works, and independent projects;
10. Confidently and effectively articulate their literary and textual experiences; and reorganize a professional and reflective approach to leadership, responsibility, personal integrity, empathy, care and respect for others, accountability and self - regulation.

Department of Commerce

Programme Specific Outcomes (PSOs) for M.COM

Upon completion of the Program, the postgraduates will be able to

1. Apply higher level knowledge in changing scenario of Marketing, Economics and Management from with national to global perspective.
2. Exhibit their skills on teamwork, lifelong learning and continuous professional development with ethics.
3. Demonstrate knowledge of business and the techniques of managing the business with special focus on marketing and insurance.
4. Use their knowledge on the basic accounting principles and the latest application oriented corporate accounting methods.
5. Apply decision-making skill through costing methods and practical application of management accounting principles.
6. Adopt computer literacy in business through latest version on tally and e-commerce principles.
7. Assess taxable income and tax liability of Assesses.
8. Take financial and investment decisions for business enterprise.
9. Plan and undertake independent researches in business by using Quantitative Techniques.
10. Get through SET, NET, TNPSC, UPSC and the like.

Department of Economics

Programme Specific Outcomes (PSOs) for MA Economics

On completion of the programme, postgraduates will be able to

1. Gain an understanding of core economic principles and how they apply to a wide range of real-world issues.
2. Study the various terms, concepts principles and theories in Economics.
3. Learn how to articulate pragmatic, principles-based policies to enhance economic well-being and promote social justice.
4. Understand research methodology in Economics to undertake research.
5. Apply the quantitative techniques and its applications in Economics.
6. Explore topics relevant to academic, Industry and policy-making fields.
7. Analyse macroeconomic policies including fiscal and monetary policies of India
8. Determine economic variables which will help to make decisions regarding entrepreneurship, market and Industry
9. Identify the theoretical and applied tools necessary to critique and create economic research.
10. Comprehend the global economic understanding like Globalization, Privatization and Liberalization.

Department of Social work

Programme Specific Outcomes (PSOs) for M.S.W

Upon completion of the Program, Post Graduates will be able to

1. Recall and recognize the meaning, principles and methods of social work and its application in the society. [Social Work Domain Knowledge]
2. Apply the meaning, principles and methods of social work in the fields of Human Resource Management, Development Management and medical and Psychiatric Social Work. [Problem Analysis]
3. Apply various legislations and policies in terms of social welfare and social security. [Application]

4. Interpret and translate the use of social work professional methods to extend the skills, tactics and application for societal development. [Cognitive]
5. Employ and execute real time remedial measures to the societal need using acquired social work knowledge. [Demonstration]
6. Apply ethical principles and commit to professional ethics, values, responsibilities and norms of social work practice. [Ethics]
7. Compare and incorporate the acquired social work skills and techniques in the fields of social work. [Skills and competencies]
8. Generate new ideas and skills to do independent research through synthesis and analysis of data, enumerate recommendations and demonstrate scholarly writing with presentations skills. [Research]
9. Transform creative knowledge, skills, values and ability towards sustainable development for Nation building. [Sustainable development]
10. Articulate social consciousness about positive and conducive social processes and to be vigilant towards destructive and negative social processes as a professionally trained social worker. [Lifelong learning]

Department of Botany

Programme Specific Outcomes (PSOs) – M.Sc. Botany

On completion of the programme, postgraduates will be able to

1. Identify the indicators of biological diversity and conduct ecosystem health assessment to create career opportunities in healing the mother earth
2. Document, monitor, sustainably manage and share biological resources without bias and exploitative profiteering motives
3. Acquire technological and analytical skills needed for industrial support services
4. Take back biotechnological innovations to strengthen nutritional and food security
5. Forecast the forthcoming climate risks and develop combating strategies for survival
6. Handle large data using computational biology to become a partner of artificial intelligence revolution

7. Decode international governance, policies, treaties and participate in politics that protect environment and forest to become the stewards of global commons
8. Develop skills to pursue career in the arena related to plant sciences namely farming, forestry and floristic pursuits find scope for effective use of technology to develop new concepts and ideas to replace the
9. Old constructs that comes from myths and misjudgement of facts
10. Learn from the study of plants to continuously innovate the change according to the need and ceaselessly struggle to find a personal and collective meaning for life.

Department of Chemistry

Programme Specific Outcomes (PSOs) – M.Sc. Chemistry

At the end of the programme, students will be able to:

1. Gain advanced knowledge in major areas of physical, organic, inorganic, analytical environmental and biological chemistry.
2. Isolate, identify and estimate organic/inorganic compounds using classical laboratory and modern analytical methods.
3. Develop skills in literature survey, designing synthetic methodologies and characterizing the ventured compounds.
4. Use ideas, and techniques of chemistry and other fields of science to acquire knowledge in the emerging areas of science.
5. Utilize graphical/virtual communications to interact productively with people from diverse background, employ online search engines and software's tools.
6. Effectively communicate themes relating to chemistry.
7. Develop skills in the handling chemical compounds by identifying their chemical and physical properties including any specific hazards associated with their usage.
8. Actively participate with government agencies in monitoring equity, and supporting nations sustainable development.
9. Pursue research & development in all disciplines of Chemical sciences, succeed in competitive examinations, and emerge as successful entrepreneurs.

10. Develop skills to work with international research and development team, contribute to research collaboration and to be familiar with intellectual property rights both national and globally.

Department of Computer Applications

Programme Specified Outcomes (PSOs) for M.C.A

MCA programme has been designed to prepare graduates for attaining the following program outcomes:

1. An ability to apply knowledge of mathematics, computer science and management in practice
2. An ability to identify, critically analyse, formulate and develop computer applications
3. An ability to select modern computing tools and techniques and use them with dexterity
4. An ability to design a computing system to meet desired needs
5. An ability to make realistic constraints such as safety, security and applicability
6. An ability to devise and conduct experiments, interpret data and provide well informed conclusions
7. An ability to understand the impact of system solutions in a contemporary, global, economical, environmental, and societal context for sustainable development
8. An ability to function professionally with ethical responsibility as an individual as well as in multidisciplinary teams with positive attitude
9. An ability to communicate effectively
10. An ability to appreciate the importance of goal setting and to recognize the need for lifelong learning.

Department of Food Science

Programme Specific Outcomes (PSOs) – M.Sc. Food Science & Nutrition

At the end of the PG Food Science & Nutrition program, the student will be able to:

1. Apply the basic principles in food processing, food preservation, food chemistry, food microbiology and food biotechnology.
2. Critically evaluate the issues in food processing, food quality and food safety

3. Explain the importance of nutraceuticals, food safety and food laws.
4. Contribute in creating nutritional awareness in making policies for government.
5. Extend the knowledge on various food processing technologies by further research.
6. Design project in formulation, standardization of new products and clinical supplementation for starting Small Scale Industries (SSI) or Medium Scale Industries (MSI).
7. Gain proficiency to become dieticians, food analyst and to be employed in government and private sectors.
8. Develop strategies to apply theoretical concepts in clinical interventions, nutritional assessment, diet planning and for health promotion.
9. Solve complex problems and acquire analytical skills using latest techniques and tools to find out the solution for food, environmental safety.
10. Articulate legal and cultural impacts of policy making

Department of Mathematics

Programme Specific Outcomes (PSOs) – M.Sc. Mathematics

On completion of the programme, the postgraduates will be able to

1. Critically analyse, logically deduce and arrive at optimal solutions to problems in every walk of life.
2. Apply the skills and the tools they learnt to different fields of study, learn independently and pursue research.
3. Explain the abstract mathematical concepts with clear understanding of the basics coherently both in written and verbal form.
4. Explore the new frontiers of knowledge in mathematics. Do programming and coding in the recent software's and languages
5. Experiment with experiential learning through projects.
6. Create new abstract mathematical structures, propose and prove or disprove mathematical statements, become competent enough to defend the new mathematical statements proposed in the relevant academic bodies
7. Be a successful learner/researcher in inter disciplinary fields of study.

8. Assimilate complex and intricate mathematical concepts and use logical deductions for construction of irrefutable proof.
9. Equip them self to suit any environment in the global context of multilingual, Multicultural, multiethnic and multiracial communities without compromising the core values and ethos which in turn prepare them for a global citizen.
10. Face competitive examinations either for placement or further studies in abroad

Department of Microbiology

Programme Specific Outcomes (PSOs) – M. Sc. Microbiology

Upon completion of the M.Sc. degree programme in Microbiology, the postgraduates will be able to

1. Formulate, articulate, retain and apply specialized language and knowledge relevant to the core concepts in biochemistry, cell and molecular biology, and microbiology.
2. Demonstrate competency in laboratory safety and in routine and specialized microbiological laboratory skills applicable to microbiological research or clinical methods
3. Communicate scientific concepts, experimental results and analytical arguments clearly and concisely, both verbally and in writing.
4. Demonstrate skills in data collection using statistical techniques and Bioinformatics.
5. Critique how microorganisms are used as model systems to study basic biology, genetics, metabolism and ecology.
6. Analyze the functions of immune system, techniques used in immunological research, occurrence of diseases and the production of vaccines.
7. Evaluate examples of the vital role of microorganisms in agriculture, food, environment, biotechnology, fermentation, medicine, and other industries important to human wellbeing.
8. Apply science to solve problems. Design projects, Formulate hypothesis, undertake experiments and find solutions.
9. Demonstrate the following laboratory skills: aseptic and pure culture techniques, preparation of and viewing samples for microscopy, use appropriate methods to identify

microorganisms, estimate the number of microorganisms in a sample, and use common lab equipment.

10. Identify and discuss the ethical issues and responsibilities of doing science

Department of Physics

Programme Specific Outcomes (PSOs) – M.Sc. Physics

On completion of the programme, postgraduates will be able to

1. Interpret fundamental interactions at quantum to astronomical scales;
2. Demonstrate a coherent understanding of the academic field of Physics, and its linkage with related disciplinary subjects;
3. Develop experimental and data analysis skills through a wide range of advanced level physics experiments;
4. Demonstrate the ability to use Physics skills such as formulating, identifying, and applying appropriate methodologies to solve and interpret a wide range of problems associated with Physics;
5. Design and execute mini projects to experience the aspects of research and to provide lucid summation of the scientific literature on a chosen topic;
6. Analyse and interpret data collected using appropriate methods, including the use of suitable software and customized worksheets, and relating the conclusions to relevant theories of Physics;
7. Demonstrate professional behaviour such as (i) being objective, unbiased and truthful in all aspects of work; and (ii) appreciation of intellectual property, environmental and sustainability issues;
8. Develop communication skills, both written and oral, for specialized and nonspecialized audience;
9. Acquire subject knowledge and skills of the calibre sought by industry, professional career and public service, as well as providing academic teachers and researchers of the future;

10. Demonstrate relevant generic skills and global competencies such as (i) skills of independent investigation of physics-related issues and problems; (ii) ability to construct logical arguments using correct technical language related to physics.

Department of Zoology

Programme Specific Outcomes (PSOs) – M.Sc. Zoology

Upon completion of this Programme, the postgraduates will be able to:

1. Analyze the concepts pertaining to the various disciplines of Zoology and the diversity of animals.
2. Analyze the concepts and mechanisms relevant to Zoology at cellular, biochemical and molecular levels to solve environmental and health problems.
3. Analyze the principles of Genetics and the process of Evolution along with evidences.
4. Critically evaluate the issues related to Ecology and Environment and find solutions to such issues using Biotechnology principles.
5. Compare the functions of various systems in man and animals and assess the concepts of Immunology.
6. Evaluate the role of microbes in food preservation, soil fertility, health and industries.
7. Analyze biological data using statistical techniques and the developments of Bioinformatics.
8. Design projects to conduct studies to derive data and compile information along with documentation.
9. Equip to appear in competitive examinations and to become teaching professionals.
10. Achieve proficiency in analytical methods and experimental techniques.

Department of Business Administration

Programme Specific Outcomes (PSOs) – M.B.A

On completion of the programme, postgraduates will be able to

1. Academic Excellence: Being a member of the academic community with advanced discipline-specific knowledge and professional skills in the relevant field with the

prowess to communicate complex ideas and to engage in current critical debates with all sensitivity and fairness.

2. Higher Order Thinking Skills: Ability to critically think, analyse, evaluate, and create new knowledge and skills both in the chosen discipline and across other fields.
3. Subscription to Quality Research: Ability to design and carry out independent research, to update oneself with current research trends and contemporary inputs in the discipline, and to evaluate research contributions.
4. Lifelong Learning: Ability to learn, unlearn, and relearn knowledge and skills in the emerging areas of the field of specialization.
5. ICT Literacy: Ability to be digital natives so that they can access a wide range of technologies for personal, academic and professional use and to be members of online communities enjoying the unlimited access blending transparency with accountability and fair practices.
6. Good Communication: Ability to participate in public discourse on varied themes and topics in one's mother tongue as well as in English as a global link language.
7. Individuals as Assets: To be academically honest, intellectually curious, ethically responsible, professionally competent, and spiritually inspiring citizens.
8. Civic and Social Responsibility: Ability to function as matured democratic citizens with participation in issues of equity, gender equality, social justice, sustainable development, and poverty alleviation.
9. Continuous Professional Development: Ability to continuously develop oneself professionally and to critically improve one's self with a view to taking appropriate decisions in diverse professional and real life environments.
10. Global Citizenship: Ability to work effectively and to live responsibly in a global context of cross-cultural life and capability, to value human diversity and lead life of timeless learning and endless opportunities.

Department of Tamil

Programme Specific Outcomes (PSOs) for MA Tamil

முதுகலைப் பாடத்திட்டத்தைக் கற்ற மாணவர்கள் பின்வரும் திறன்களைப் பெற்றிருப்பர் (கற்றலின் விளைவு):

1. பரந்துபட்ட ஓர் இலக்கியப் படைப்பைத் திறந்த மனதுடன் இனங்கண்டு – திறனாய்வு நோக்குடன் மதிப்பீடும் செய்து – அவற்றின் வழி அக்குறிப்பிட்ட படைப்பின் நோக்கத்திற்கு நியாயம் செய்வது போன்ற முறையில், அணுகும் திறன் பெற்றிருப்பர்.
2. உலகப் பொது மொழிக்கான அடையாளம் கொண்ட தமிழ்மொழியின் சமூகம், சமயம், பண்பாடு, அரசியல் சார்ந்த அறங்களை – நடப்பியல் கூறுகளுடன், தொன்மை சார்ந்த ஒழுகலாறுகளுடன் உள்ளடக்கி - இலக்கியப் படைப்புகளைத் தொடர்ந்து வாசித்து அவற்றின் மீது காத்நிரமான விவாதங்களை வைக்கும் திறன் பெற்றிருப்பர்.
3. சமூகம், குடும்பம், தனிமனிதன் சார்ந்த ஒழுக்கம், மதிப்பு, உரிமை போன்றவை – வரன்முறைக்கு உட்பட்டும் மீறியும் இருப்பதன் மூலம் - மெய்மைகளை அடையாளம் காணும் திறன் பெற்றிருப்பர்.
4. மரபிலக்கணம், மொழியியல் வாயிலாகப் பிழையின்றிப் பேசவும், எழுதவும், வாசிக்கவும் - காலந்தோறும் மாறிவரும் பேச்சுமொழியின் முக்கியத்துவத்தை அறிந்து மொழிவளத்தை மேம்படுத்தவுமான திறன்களைப் பெற்றிருப்பர்.
5. தொல் எச்சங்களை இலக்கியங்களுடன் ஒப்பீடு செய்து - தற்சார்பு இல்லாத கலை, இலக்கிய வரலாற்றை மறுபரிசீலனைக்காட்டுவதில் செய்து ஏற்றுக்கொள்ளுகிற திறன்களைப் பெற்றிருப்பர்.
6. தமிழ் மரபில் ஏற்பட்டுள்ள மாற்றம், சிதைவு, மீட்டுருவாக்கம் பற்றிய சிந்தனைகளால் தொடர்ந்து வாசிப்பதும் – மறுவாசிப்பு செய்வதுமான திறன்களைப் பெற்றிருப்பர்.
7. பழந்தமிழ் இலக்கியப் பிரதிகளின் வழிப்பெற்ற அனுபவத்தால் – செவ்வியல் தன்மைகளை மெய்ப்பிக்கும் திறன் பெற்றிருப்பர்.
8. மெய்மையான, பயனுள்ள, தெளிவான இலக்கண - இலக்கியப் படைப்புகளைத் தொடர்ந்து வாசிப்பதனால் - திறனாய்வுக் கட்டுரை எழுதுவது, ஆய்வு நூல் படைப்பது போன்ற செயல்வடிவங்களைப் பெறும் திறன் பெற்றிருப்பர்.
9. தமிழர்களின் புலம்பெயர்வால், உலக அரங்கில் தமிழ்மொழிக்கான இடம் குறித்து அலசி ஆராயும் திறன் பெற்றிருப்பதோடு – மற்ற மொழிகளுடன் கொள்ளும் உறவு – தொழில் நுட்பங்களோடு கொள்ளுகின்ற உறவு – ஊடகம் வாயிலாகக் கொள்ளுகின்ற உறவு – போன்ற விவாதங்களில்

பங்கெடுத்துக்கொண்டு ஆரோக்கியமான மொழிவளர்ச்சிக்கு வித்திடும் திறன்களைப் பெற்றிருப்பர்.

10. இலக்கியங்கள் வழியாகக் கற்பிக்கப்படும் மாணுட மதிப்பக்களை நன்கு உள்வாங்கிக்கொண்டு – நாட்டிற்கு நல்ல குடிமகனாகவும், நல்ல குடும்ப உறுப்பினராகவும், வறியவரையும் எளியவரையும் பேணும் உள்மனம் கொண்டவராகவும், அறவழியில் வாழ்க்கை வாழ் விருப்பம் உடையவராகவும், சமய ஒற்றுமையை விரும்புவவராகவும், பெண்ணியச் சிந்தனை உடையவராகவும் விளங்குவதற்கான திறன்களைப் பெற்றிருப்பர்.
