MAR IVANIOS COLLEGE (AUTONOMOUS)

Affiliated to the University of Kerala,
Thiruvananthapuram
Kerala

SCHEME AND SYLLABUS FOR THE
FOUR YEAR UNDERGRADUATE PROGRAMME
(FYUGP)

BA ANALYTICAL ECONOMICS
(With effect from 2024 Admissions)

Approved by the Board of Studies in
Economics, History and Political Science

CONTENTS

SEMESTER I			
10.	DSC A	Mathematical Methods For Economics I	20
11.	DSC B/C	Economic History Of India	25
12.	DSC B/C	Principles Of Economics	30
13.	MDC	Human Resource Management	36
SEMESTER II			
14.	DSC A	Introductory Microeconomics	41
15.	DSC B/C	History Of Economic Thought	47
16.	DSC B/C	Kerala's Development Experience	52
17.	MDC	Business Journalism	57

PREAMBLE

National Education Policy (NEP 2020) envisions 'higher education as playing an extremely important role in promoting human as well as societal wellbeing and in India as envisioned in its Constitution - a democratic, just, socially conscious, cultured, and humane nation upholding liberty, equality, fraternity, and justice for all' (Section 9.1). NEP also expects higher education 'to develop good, thoughtful, well-rounded, and creative individuals, enabling an individual to study one or more specialized areas of interest at a deep level, and also develop character, ethical and Constitutional values, intellectual curiosity, scientific temper, creativity, spirit of service, and 21st century capabilities across a range of disciplines including sciences, social sciences, arts, humanities, languages, as well as professional, technical, and vocational subjects' (Section 9.1.1). Hence, more than the creation of greater opportunities for individual employment, higher education represents the key to more vibrant, socially engaged, cooperative communities and a happier, cohesive, cultured, productive, innovative, progressive, and prosperous nation. (Section 9.1.3). NEP also identifies some of the major problems currently faced by the higher education system in India (Section 9.2) and envisions a complete overhaul and re-energizing of the higher education system to overcome these challenges and thereby deliver high-quality higher education, with equity and inclusion (Section 9.3). One of the major changes which the policy proposes is moving towards a more multidisciplinary undergraduate education (Section 9.3(b)) which develops all capacities of human beings -intellectual, aesthetic, social, physical, emotional, and moral in an integrated manner (Section 11.3). In order to achieve this in its full potential, NEP visions the adjusting of the structure and lengths of degree programmes accordingly. "The undergraduate degree will be of either 3 or 4-year duration, with multiple exit options within this period, with appropriate certifications, e.g., a certificate after completing 1 year in a discipline or field including vocational and professional areas, or a diploma after 2 years of study, or a Bachelor's degree after a 3-year programme. The 4-year multidisciplinary Bachelor's programme, however, shall be the preferred option since it allows the opportunity to experience the full range of holistic and multidisciplinary education in addition to a focus on the chosen major and minors as per the choices of the student." (Section 11.9)

In accordance with the NEP 2020, the UGC formulated a new student-centric "Curriculum and Credit Framework for Undergraduate Programmes (CCFUP)" incorporating a flexible choice-based credit system, multidisciplinary approach, and multiple entry and exit options and establishing three Broad Pathways,

(a) 3-year UG Degree,

(b) 4-year UG Degree (Honours), and

(c) 4-year UG Degree (Honours) with Research)

Accordingly, the Kerala Higher Education Reforms Commission 2022, headed by Prof Shyam B. Menon, has recommended a comprehensive reform in the undergraduate curriculum with the adoption of the 4-year undergraduate Programmes, which will bring undergraduate education in Kerala at par with the universities abroad. Consequently, Kerala State Curriculum Committee for Higher Education 2023 has been constituted, with Dr Suresh Das as Chairman, and they have proposed a model Kerala State Higher Education Curriculum framework for undergraduate education.

The University of Kerala has decided to introduce the Four Year Under Graduate Programmes (FYUGP) from the academic year 2024-2025 onwards in its teaching departments and all affiliated colleges, and has issued many draft documents and conducted college level awareness programmes about the same.

Mar Ivanios College, by virtue of its autonomy status, conferred in 2014 and extended in 2022, vide University Grants Commission (Conferment of Autonomous Status Upon Colleges and Measures for Maintenance of Standards in Autonomous Colleges) Regulations, 2023, has the power to review existing courses/programmes and, restructure, redesign and prescribe its own courses/programmes of study and syllabi and to formulate new courses/programmes within the nomenclature specified by UGC as per the Specification of Degrees 2014 as amended from time to time. Accordingly, the Board of Studies in Economics, History and Political Science of Mar Ivanios College (Autonomous) proposed the implementation of the FYUGP scheme with effect from 2024 admission onwards and prepared the scheme and syllabi through many of the meetings and discussions. The Academic Council of the college which met on 30th April gave discussed the proposal and syllabi in detail and approved the same to be implemented from 2024 admission onwards, subject to the final directions of the University of Kerala.

The salient features of the syllabus prepared and presented by the Board of Studies include the following:

The syllabus is designed to bring about value added learning in Economics and provide tools to promote empirical learning and analytical thinking. Courses such as Mathematical Methods for Economics, Statistical tools for Economics, Econometrics, Operations Research, Data Science and Data Analytics enable the students to develop a solid quantitative and analytical base along with a strong theoretical grip of Economics.

- The curriculum is designed based on Outcome Based Education (OBE) approach.

- The curriculum follows Choice-Based Credit System (CBCS): This system allows students to select courses from a prescribed list. A specified number of credits must be earned to award the degree

- The curriculum follows the basic framework, course wise/programme-wise minimum/maximum credits set by the University of Kerala for FYUGP and

  abides by the basic mandatory principles of **Four Year Under Graduate Programmes (UoK-FYUGP) Regulations, 2024.**

- The Programme aims to equip the students with the basic knowledge of Economics and the necessary skills for analyzing basic economic issues at the micro and macro levels.
- Courses like Indian Economy, Kerala Economy, Economic History of India, Gender Economics, Environmental Economics and Disaster Management, Sustainable Development and Development Economics familiarize students with the important issues in economic development and the tools for measuring economic growth and development and its social and environmental impact.
- Courses such as Mathematical Methods for Economics, Statistical tools for Economics, Econometrics, Operations Research, Data Science and Data Analytics are directed towards

mastering the essential mathematical and statistical methods, econometric tools to be applied in the analytical aspects of Economics, imbibing the basic methodology of research and developing skills in data analytics.

- Public Economics, Financial Economics, Money and Modern Banking, Investment and Portfolio Management and Economics and Personal Finance make the students proficient in the fiscal framework of the Government for assessing its performance as well as to familiarize them the basic concepts and functioning of the financial markets and services.

- Courses like International Economics help in understanding of the basic international trade and financial system.

Graduate Attributes and Programme Outcomes (POs):

The National Higher Education Qualification Framework (NHEQF) envisages that students on completion of a programme of study must possess and demonstrate the expected graduate profile /attributes acquired through one or more modes of learning. The graduate profile/attributes indicate the quality and feature or characteristics of the graduate of a programme of study, including learning outcomes relating to the disciplinary area(s) relating to the chosen field(s) of learning and generic learning outcomes that are expected to be acquired by a graduate on completion of the programme(s) of study. The graduate profile/attributes include capabilities that help widen the current knowledge base and skills, gain and apply new knowledge and skills, undertake future studies independently, perform well in a chosen career, and play a constructive role as a responsible citizen in the society. The graduate profile/attributes are acquired incrementally and describe a set of competencies that are transferable beyond the study of a particular subject/disciplinary area and programme contexts in which they have been developed. Graduate profile/attributes are fostered through meaningful learning experiences made available through the curriculum and learning experience, the total college/university experience, and a process of critical and reflective thinking. Mar Ivanios College (Autonomous) is fully committed to ensuring the attainment of the necessary graduation attributes by the students. The college has clearly defined its raison de'tre, the philosophy of its existence, through the Motto "Truth Shall Liberate You" (Veritas Vos Liberabit) which refers to the ultimate enlightenment which can emerge only at the intersection of sharp intellect, sound physique, strong mind, staunch ethics, and profound spirituality. This is further made explicit through its Vision, Mission and Goals and the same expect all students who graduate from the college to:

- Have inculcated "the values of truth and charity for the protection and promotion of human dignity and of a cultural heritage, through teaching, research, and extension activities dedicated to society";

- Be co-creators of a vibrant academic community known for its innovation, intellectual rigour and social commitment;

- Be "intellectually trained, morally upright, socially committed, spiritually inspired and ecologically conscious young men and women who would be dedicated to working for the good of society, the nation and the world";

- Have acquired "global competencies and skills";

- Have inculcated a sense of harmony, equality and fraternity among youth, transcending religious,

linguistic, regional or sectional diversities; and

- Have developed "scientific temper, humanism and the spirit of inquiry and reform".

Programme Outcomes are the expected student attributes achieved by a student after the student completes the FYUGP from any of the streams/pathways.

The Programme Outcomes (POs) for the FYUGP programmes across all streams and pathways, based on the above core philosophy, and in consonance with the National Higher Education Qualifications Framework (NHEQF) are given below:

By the end of the Four-Year Under-Graduate Programme, students will:

PO 1	**Demonstrate the acquisition of all necessary knowledge and skills within their disciplinary/ multi-disciplinary areas of learning.** These include the acquisition of: • comprehensive knowledge and coherent understanding of their chosen disciplinary/ interdisciplinary areas of study, their linkages with related fields, and the awareness of current trends in their chosen area of study; • essential knowledge for skilled work in chosen field(s), including self-employment and entrepreneurship skills; • proficiency in specialized areas within chosen fields of study, encompassing diverse practical skills applicable to different situations within those fields; • the ability to apply learned knowledge to novel situations, solve problems, and relate concepts to real-world scenarios rather than just memorizing curriculum content.
PO 2	**Acquire problem-solving, critical thinking, analytical reasoning skills and demonstrate creativity in their thought processes** by demonstrating the ability to: • solve different kinds of problems in familiar and non-familiar contexts both within and outside their disciplinary/ multidisciplinary areas of learning; • apply analytic thought to a body of knowledge, including the analysis and evaluation of policies, and practices, as well as evidence, arguments, claims, and beliefs; • analyse and synthesize data from a variety of sources and draw valid conclusions and support them with evidence and examples. • the ability to plan, execute and report the results of an experiment or investigation; • adhere to scientific temper and ethics in their thought process; • adopt innovative, imaginative, lateral thinking, interpersonal skills and emotional intelligence; and • incubate entrepreneurial and start-up ideas.
PO 3	**Develop a profound environmental dedication by fostering ecological awareness and engaging in actions that promote sustainable development** by achieving the

	ability to
	• recognize environmental and sustainability issues, and participate in actions to promote sustainable development as well as mitigate the effects of environmental degradation, climate change, and pollution;
	• contribute to effective waste management, conservation of biological diversity, management of biological resources and biodiversity, forest and wildlife conservation, sustainable development and living, and the preservation of life in all forms.
	• Participate in community-engaged services/ developmental activities and thus exemplify the ideals of community engagement and service learning and deep social commitment.
PO 4	**Accomplish perfect communication, teamwork, and leadership skills, particularly in academic and professional settings, while demonstrating nuance and attention to etiquette in all communicative contexts.** This will enable them to:
	• listen carefully, and read texts and research documents, and present complex information with clarity and precision to different audiences;
	• express thoughts and ideas and communicate effectively through speech and writing using appropriate media;
	• communicate using language which is respectful of gender and minority orientations;
	• act together as a group or a team in the interests of a common cause and working efficiently as a member of a team;
	• inspire the team with a vision to achieve a stated goal, and use management skills to guide the team in the right direction.
PO5	**Acquire the necessary skills, including 'learning to learn' skills, and foster innovative ideas to improve competence and employability, keeping pace with the evolving global landscape and technological advancements** by demonstrating the ability to:
	• pursue learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social, and cultural objectives, and adapting to changing trades and demands of the workplace, including adapting to the changes in work processes in the context of the fourth industrial revolution, through knowledge/ skill development/reskilling;
	• work independently, identify appropriate resources required for further learning;
	• acquire organizational and time management skills to set self-defined goals and targets with timelines;
	• be a proactive life-long learner.
	• use ICT in a variety of learning and work situations;
	• access, evaluate, and use a variety of relevant information sources, and use

	appropriate software for analysis of data;
	• navigate cyberspaces by following appropriate ethical principles and cyber etiquette.
	• use cutting edge AI tools with equal commitment to efficiency and ethics.
	• think 'out of the box' and generate solutions to complex problems in unfamiliar contexts;
PO6	**Develop research-related skills including the ability to conceptualize research hypotheses/projects and adopt suitable tools and methodologies for analysis** with: • a keen sense of observation, inquiry, and capability for asking relevant/ appropriate research questions; • the ability to problematize, synthesize, and articulate issues and design research proposals; • the ability to define problems, formulate appropriate and relevant research questions, formulate hypotheses, test hypotheses using quantitative and qualitative data, establish hypotheses, make inferences based on the analysis and interpretation of data, and predict cause-and effect relationships; • the capacity to develop appropriate methodology and tools for data collection; • the appropriate use of statistical and other analytical tools and techniques; • the ability to plan, execute and report the results of an experiment or investigation; • the ability to acquire the understanding of basic research ethics and skills in practicing/doing ethics in the field/ in personal research work, regardless of the funding authority or the field of study
PO7	**Assimilate a sound value system, a sense of autonomy, multicultural competence, social commitment, and the spirit of inclusivity and empathy by imbibing the spirit and the holistic ethos of the 'Multi-Dimensional Ivanian' (MDI) approach.** This will enable them to: • embrace and practice constitutional, humanistic, ethical, and moral values in life, including universal human values of integrity, truth, righteous conduct, peace, love, nonviolence, scientific temper, citizenship values; • identify ethical issues related to work, follow ethical practices and be objective, unbiased, and truthful actions in all aspects of work, including avoiding unethical behaviour such as fabrication, falsification or misrepresentation of data, or committing plagiarism, and adhering to intellectual property rights; • exercise responsibility and demonstrate accountability in applying knowledge and/or skills in work and/or learning contexts appropriate for the level of the qualification, including ensuring safety and security at workplaces; • practice responsible global citizenship required for responding to contemporary

	global challenges, enabling learners to become aware of and understand global issues and to become active promoters of more peaceful, tolerant, inclusive, secure, and sustainable societies;
	• effectively engage in a multicultural group/society and interact respectfully with diverse groups;
	• identify with or understand the perspective, experiences, or points of view and emotions of another individual or group.
	• demonstrate gender sensitivity and adopt a gender-neutral approach, as also empathy for the less advantaged and the differently-abled including those with learning disabilities;
	• demonstrate proficiency in arts/ sports/ games, physical, mental and emotional fitness, entrepreneurial /organizational /pubic speaking/environmental/ community-oriented areas by actively participating in the wide range of co-curricular activities that are available to the students of Mar Ivanios College.

Programme Specific Outcomes (PSOs)

In conformity with the POs, the Programme Specific Outcomes (PSOs) of the Major in Analytical Economics are drafted as given below:

PSO1	Have acquired the basic knowledge of Economics and the necessary skills for analyzing basic economic issues at the micro and macro levels
PSO2	Be familiar with the important issues in economic development and the tools for measuring economic growth and development with emphasis on development aspects of Indian Economy in general and Kerala Economy in particular
PSO 3	Master the essential mathematical and statistical methods and econometric tools to be applied in the analytical aspects of Economics.
PSO 4	Have imbibed the basic methodology of research and develop skills in data analytics.
PSO 5	Become proficient in the fiscal framework of the Government for assessing its performance and demonstrate the capacity for understanding of the basic international trade and financial system.
PSO 6	Be familiar with the origin and development of money and modern banking and become proficient in the basic concepts and functioning of the financial markets and services.

Course and Credit Strcuture of FYUGP

The pathway preferably followed by the department will be Major with Minor or Major with multiple disciplines of study.

The Course and Credit Strcuture of FYUGP is given below:

Sem	DSC (4 Cr)	DSE (4	AEC (3 Cr)	SEC (3 Cr)	MDC (3 Cr)	VAC (3 Cr)	Internship (credit-2)/	Total courses	Total credits

		Cr)					Project/ Additional Courses (credit-12)		
I	A-1 B-1 C-1		AEC (Eng)-1 AEC(OL)-2		MDC-1			6	21
II	A-2 B-2 C-2		AEC (Eng)-3 AEC(OL)-4		MDC-2			6	21
III	A-2 B-2 C-2	DSE A-1			MDC (Kerala Studies)-3	VAC-1		6	22
IV	A-4 A-5	DSE A-2		SEC-1		VAC-2 VAC-3	Internship	6	21
V	A-6 A-7 A-8	DSE-3 DSE-4		SEC-2				6	23
VI	A-9 A-10 A-11	DSE-5 DSE-6		SEC-3				6	23
Total	A (11) B (3) C (3)	6	4	3	3	3	1*	36	133
	EXIT OPTION AVAILABLE AND STUDENTS WILL BE AWARDED UG DEGREE WITH MAJOR IN A								
VII	A-12 A-13 B/C-4 B/C-5 B/C-6	DSE-7						6	24
VIII	MOOC courses A-14, A-15						Research Project/ Internship /Project or 03 courses -12Cr	2+1**/ 3***	20
Total	A (15) B(3) C (3) B/C(3)	7	4	3	3	3	1*+1**/ 3***	44+1* + 1**/3***	177

A – Major Discipline

B/C-Minor/Multiple discipline

* - Mandatory Internship at the end of Semester 4

** - Research Project/ Internship /Project as part of Honours with Research

*** - Additional courses of 4 credits each.

Cr - Credits

- **Research group project for students exiting after UG 3 years:** Students who propose to exit after 3 Year UG programme can do a group project with an extra two credits to obtain research experience in discipline-specific areas of the program. The BoS can decide the number of students for the group and the evaluation criteria.

- Students will be able to take other pathways permissible under **University of Kerala Four Year Under Graduate Programmes (UoK-FYUGP) Regulations, 2024,** subject to the availability of courses/ faculty/infrastructure of the college.

- The Board of Studies shall prepare and publish a list of online courses at different levels before the commencement of classes in the respective semester offered in various online educational platforms recognised by the academic council of the college, which can be opted by the students for acquiring additional credits.

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Course Participation/Attendance-

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1. A student shall be permitted to register for the end-semester evaluation of a specific course to acquire the credits only if the student has completed 75% of the prescribed classroom activities in physical, online, or blended modes, as stipulated by the BoS, including any makeup activities as specified by the faculty of that particular course.
2. The reasons/cases of permissible authorised leave shall be specified by the college, with the approval of the Academic Council, ratified by the Governing Body.
3. The condonation facility shall be availed as per the existing University/college norms.

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Assessment and Evaluation

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1. The assessment of a course shall combine a Continuous Comprehensive Assessment (CCA) and an End Semester Evaluation (ESE).
2. For courses without practical/lab modules, 30% weightage shall be given for CCA and the remaining 70% of the weight shall be for the ESE.
3. CCA will have two sub-components: Formative Assessment (FA) and Summative Assessment (SA).
4. The CCA subcomponents will be given marks as per the following proportions:
   - Discipline specific summative assessment –   15 % of the total
   - Course attendance   -   5 % of the total.
   - Discipline specific formative assessment   -   10 % of the total.
5. The details of summative and formative assessment criteria, including that of attendance, will be specified by each course coordinator at the beginning of the semester, with the approval of the respective Head of the Department/BoS Chairperson and the Principal, and will be published on the college website.

6. For courses with practical/lab modules, 40% weightage shall be given for CCA and the remaining 60% of the weight shall be for the ESE.

7. In such cases specified in the item above, the CCA subcomponents will be given marks as per the following proportions:
   - Discipline specific summative assessment – 10% of the total
   - Course attendance (Formative) - 5 % of the total.
   - Discipline specific formative assessment - 15% of the total.
   - Summative assessment(Practical record/skill/practical test, etc.) – 10% of the total.

8. The Course Coordinator shall be responsible for evaluating all the components of CCA for the course in question. Any grievances regarding the same shall be submitted to the Course Coordinator within 5 days of the publication of the same on the department notice board or official class group. If the grievance is not settled at the Course Coordinator level, the student is free to appeal to the Head of the Department, within the next 3 days, who will discuss the same in the Department Level Monitoring Committee (DLMC). If still needed, students can further appeal to the College Level Monitoring Committee (CLMC) or in essential situations the University Level Monitoring Committee (ULMC) in a time period as specified by these bodies.

9. Regarding evaluation, one credit will be evaluated for 20 marks in a semester; thus, a 4-credit course will be evaluated for 80 marks, and 3-credit courses for 60 marks. However, any changes to this if brought by the University will be followed.

10. The duration of the end semester examination of a course with 4 credits will be 2 hours and the same for a course with 3 credits may be 1.5 hours/2 hours.

Mark Distribution Table

Course	Credit		Marks		Lecture			Practical		
	Lecture	Practical	Lecture	Practical	CCA (30%)		ESE (70%)	CCA (40%)		ESE (60%)
					SA (50%)	FA (50%)		SA (50%)	FA (50%)	
4 credit courses	4	0	80	0	12	12	56	0	0	0
	3	1	60	20	9	9	42	4	4	12
	2	2	40	40	6	6	28	8	8	24
	1	3	20	60	3	3	14	12	12	36
	0	4	0	80	0	0	0	16	16	48
3 credit courses	Credits		Marks		Lecture			Practical		
	Lecture	Practical	Lecture	Practical	CCA (30%)		ESE (70%)	CCA (40%)		ESE (60%)
					SA (50%)	FA (50%)		SA (50%)	FA (50%)	
	3	0	60	0	9	9	42	0	0	0
	2	1	40	20	6	6	28	4	4	12
	1	2	20	40	3	3	14	8	8	24
	0	3	0	60	0	0	0	12	12	36

Letter Grades and Grade Point

1. A mark system is followed to evaluate each question. For each course in the semester, letter grades and grade points are introduced in a 10-point indirect grading system as per the guidelines given below.

2. The Semester Grade Point Average (SGPA) is computed from the grades to measure the student's performance in a given semester. The SGPA is based on the current term's grades, while the Cumulative Grade Point Average (CGPA) is based on the grades in all courses taken after joining the programme of study.

3. The weighted grade point will be mentioned in the student's final grade cards, issued by the college, based on the marks obtained.

4. **The grades and grade points will be given as per the following format:**

Letter Grade	Grade Point	Percentage of marks (X) (CCA + ESE together)	Class
O (Outstanding)	10	$X \geq 95\%$	FIRST CLASS WITH DISTINCTION
A+ (Excellent)	9	$85\% \leq X < 95\%$	
A (Very Good)	8	$75\% \leq X < 85\%$	
B+ (Good)	7	$65\% \leq X < 75\%$	FIRST CLASS
B (Above Average)	6	$55\% \leq X < 65\%$	
C (Average)	5	$45\% \leq X < 55\%$	SECOND CLASS
$P\ (Pass)^*$	4	$35\% \leq X < 45\%$	THIRD CLASS
F (Fail)	0	X< 35%	FAIL
Ab (Absent)	0		FAIL

- For a course PASS, separate minimum of 35% is needed for CCA and ESE.

- Less than 35% in either ESE or CCA is FAIL.

Computation of SGPA and CGPA

SGPA (Semester Grade Point Average) and CGPA (cumulative Grade Point Average) will be computed as follows:

1. The SGPA is the ratio of the sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student in the semester. That is,

$$S_j = \frac{\sum(C_{ij} \times G_{ij})}{\sum C_{ij}}$$

where, S_j is the SGPA in the jth semester,

C_{ij} is the number of credits for the ith course in the jth semester, and

G_{ij} is the the grade point scored by the student in the ith course in the jth semester.

2. The CGPA is also calculated in the same manner considering all the courses undergone by a student over all the semesters of a programme. That is,

$$CGPA = \frac{\sum(C_i \times S_i)}{\sum C_i}$$

where S_i is the SGPA in the ith semester and

$\sum C_i$ is the total number of credits in the ith semester.

3. The SGPA and CGPA shall be rounded to 2 decimal points and reported in the transcripts

4. **Requirement for the successful completion of a Semester**: SGPA of 4 or above and a PASS in all the courses, that is, minimum total of 35% mark in each course (CCA + ESE), with a separate minimum of 35% mark for both CCA and ESE. Appropriate and permissible rules of rounding off numbers may be adopted as per decisions of the Academic Council.

Field trip/study tour:

A study tour to places of interest in India focusing on secularism and oneness promotes intercultural understanding, tolerance, and the appreciation of diversity, fostering the values of secularism and unity in a multicultural society. Field visits provide students with practical, hands-on experiences that enhance their understanding of theoretical concepts taught in the classroom. By seeing and experiencing real-world applications of what they learn, students are better equipped to grasp and retain knowledge. This engagement can lead to improved academic performance and a deeper comprehension of the subject matter. Hence, field trip/study tour will be part of the 3 Year/4 Year UG Programme majoring in Analytical Economics, offered by the Department of Analytical Economics (SF), Mar Ivanios College (Autonomous). The number of days for the field trip/study tour will be decided by the Principal in consultation with the BoS and the College Council.

LIJI D
Chairman
Board of Studies in Department of
Economics, History and Political
Science,
Mar Ivanios College (Autonomous),
Thiruvananthapuram

Thiruvananthapuram
10-05-2024

List of Courses:

Course Code	Course Title	Course Category	Credits	Hour distribution per week		
				L	T	P
SEMESTER I | Academic Level 100-199						
MIUK1DSCAE100.1	MATHEMATICAL METHODS FOR ECONOMICS I	DSC A	4	**4**	-	-
MIUK1DSCAE101.1	ECONOMIC HISTORY OF INDIA	DSC B/C	4	**4**	-	-
MIUK1DSCAE102.1	PRINCIPLES OF	DSC B/C	4	**4**	-	-

Course Code	Course Title	Course Category	Credits	Hour distribution per week		
				L	T	P
	ECONOMICS					
MIUK1MDCAE103.1	HUMAN RESOURCE MANAGEMENT	MDC	3	3	-	-

SEMESTER II | Academic Level 100-199

Course Code	Course Title	Course Category	Credits	Hour distribution per week		
				L	T	P
MIUK2DSCAE150.1	INTRODUCTORY MICROECONOMICS	DSC A	4	4	-	-
MIUK2DSCAE151.1	HISTORY OF ECONOMIC THOUGHT	DSC B/C	4	4	-	-
MIUK2DSCAE152.1	KERALA'S DEVELOPMENT EXPERIENCE	DSC B/C	4	4	-	-
MIUK2MDCAE153.1	BUSINESS JOURNALISM	MDC	3	3	-	-

SEMESTER III | Academic Level 200-299

Course Code	Course Title	Course Category	Credits	Hour distribution per week		
				L	T	P
MIUK3DSCAE200.1	INTERMEDIATE MICROECONOMICS	DSC A	4	4	-	-
MIUK3DSCAE201.1	WELFARE ECONOMICS	DSC B/C	4	4	-	-
MIUK3DSCAE202.1	MONEY AND MODERN BANKING	DSC B/C	4	4	-	-
MIUK3DSEAE203.1	MATHEMATICAL METHODS FOR ECONOMICS II	DSE	4	4	-	-
MIUK3VACAE204.1	ENVIRONMENT ECONOMICS AND DISASTER MANAGEMENT	VAC	3	3	-	-

SEMESTER IV | Academic Level 200-299

Course Code	Course Title	Course Category	Credits	Hour distribution per week		
				L	T	P
MIUK4DSCAE250.1	INTRODUCTORY MACROECONOMICS	DSC A	4	4	-	-
MIUK4DSCAE251.1	STATISTICAL METHODS FOR ECONOMICS	DSC A	4	4	-	-
MIUK4DSEAE252.1	GAME THEORY AND	DSE	4	4	-	-

	INFORMATION ECONOMICS					
MIUK4SECAE253.1	DATA SCIENCE FOR ECONOMICS	SEC	3	**1**	**-**	**2**
MIUK4VACAE254.1	ECONOMICS AND PERSONAL FINANCE	VAC	3	**3**	**-**	**-**
MIUK4VACAE255.1	SUSTAINABLE DEVELOPMENT*(to be picked from University basket)*	VAC	3	**3**	**-**	**-**
MIUK4INTAE256.1	INTERNSHIP	INT				

SEMESTER V | Academic Level 300-399						
Course Code	**Course Title**	**Course Category**	**Credits**	**Hour distribution per week**		
				L	**T**	**P**
MIUK5DSCAE300.1	INTERMEDIATE MACROECONOMICS	DSC A	4	**4**	**-**	**-**
MIUK5DSCAE301.1	ECONOMETRICS I	DSC A	4	**4**	**-**	**-**
MIUK5DSCAE302.1	OPERATIONS RESEARCH	DSC A	4	**4**	**-**	**-**
MIUK5DSEAE303.1	GENDER ECONOMICS	DSE	4	**4**	**-**	**-**
MIUK5DSEAE304.1	FINANCIAL ECONOMICS	DSE	4	**4**	**-**	**-**
MIUK5SECAE305.1	INVESTMENT AND PORTFOLIO MANAGEMENT	SEC	3	**3**	**-**	**-**

SEMESTER VI | Academic Level 300-399						
Course Code	**Course Title**	**Course Category**	**Credits**	**Hour distribution per week**		
				L	**T**	**P**
MIUK6DSCAE350.1	INDIAN ECONOMY	DSC A	4	**4**	**-**	**-**
MIUK6DSCAE351.1	DEVELOPMENT ECONOMICS	DSC A	4	**4**	**-**	**-**
MIUK6DSCAE352.1	INTERNATIONAL ECONOMICS	DSC A	4	**4**	**-**	**-**
MIUK6DSEAE353.1	PUBLIC ECONOMICS	DSE	4	**4**	**-**	**-**
MIUK6DSEAE354.1	ECONOMETRICS II	DSE	4	**4**	**-**	**-**
MIUK6SECAE355.1	RESEARCH METHODOLOGY	SEC	3	**3**	**-**	**-**
SEMESTER VII | Academic Level 400-499						
Course Code	**Course Title**	**Course Category**	**Credits**	**Hour distribution per week**		
				L	**T**	**P**
MIUK7DSCAE400.1	ADVANCED MICROECONOMICS	DSC A	4	**4**	**-**	**-**
MIUK7DSCAE401.1	ADVANCED MACROECONOMICS	DSC A	4	**4**	**-**	**-**
MIUK7DSEAE402.1	DATA ANALYTICS FOR ECONOMISTS	DSE	4	**2**	**-**	**2**
SEMESTER VIII | Academic Level 400-499						
Course Code	**Course Title**	**Course Category**	**Credits**	**Hour distribution per week**		
				L	**T**	**P**
MIUK8CIPAE450.1	CAPSTONE INTERNSHIP	CIP	12	**-**	**-**	**-**

Mar Ivanios College (Autonomous)

Discipline	**ANALYTICAL ECONOMICS**				
Course Code	**MIUK1DSCAE100.1**				
Course Title	**MATHEMATICAL METHODS FOR ECONOMICS I**				
Type of Course	**DSC A**				
Semester	I				
Academic Level	100- -199				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	Revise the portions of algebra and functions that were taught in VIII- X grades in school				
Course Summary	This course intends to equip the student with the basic mathematical tools required for economic analysis. The course prepares the student to understand the role of mathematics in economic model building and also the application of mathematics in microeconomic and macroeconomic analysis.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Introduction to Mathematical Economics**	**10**
	1	Scope of Economics	
	2	Methods of formulating economic theories: Positive and Normative economics, Deductive & Inductive, merits and demerits	
	3	Economic models: Micro & Macro models	
	4	Tools of Economic Analysis: Static, Comparative Static, Dynamic	
	5	Equilibrium Analysis: Partial and General, Stable and Unstable	
	6	Introduction to Analytical Economics- Scope of Analytical Economics	
	7	Role of Mathematics in economic theories	
II		**Functions**	**10**
	8	Economic variables and Constants: Discrete, Continuous, Exogenous and Endogenous	
	9	Set theory – Basic operations and properties, Introduction to concept of Limit Points- open and closed sets, concave and convex sets	
	9	Functions: Linear, Non-Linear, Homogenous, and Non-Homogenous.	
	10	Graph of a Function: Graphs, Slopes and Intercepts	
	11	Equations: Linear, Quadratic, Simultaneous and their solutions.	
III		**Differentiation**	**15**
	12	Limits and Continuity of function	
	13	Meaning of Differentiation	

	14	Partial and Total differentiation	
	15	Chain rule, derivatives of implicit functions	
	16	Economic application of Differentiation	
	17	Euler's Theorem	
IV		**Integration**	13
	18	Meaning—Indefinite and Definite integral	
	19	Rules of Integration	
	20	Economic application of integrals—Total concepts, Marginal concepts, Consumer's Surplus, Producer's Surplus.	
V		**Applications**	12
	18	Sample model-building (micro and macro)	
	19	Exercises on construction of economic functions and graphs	
	21	Exercises on economic application of differentiation.	
	22	Exercises on economic application of integral concepts	

Reading List:

Samuelson, P (1983): Foundations of Economic Analysis, Harvard University Press.

Allen, R.J.D (2008): Mathematical Analysis for Economics, Macmillan Press, London.

Dowling, E.T (2000): Introduction to Mathematical Economics, Schaum's Online Series, McGraw Hill, New Delhi.

Chiang, A.C (2017) : Fundamental Methods of Mathematical Economics, McGraw Hill.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Understanding the basic concepts, scope and nature of economics.	U	PSO1
CO2	Analyzing micro and macro models of economics and tools of economic analysis.	An	PSO1
CO3	Understanding the basic concepts of mathematics and their applications in Economics.	U	PSO3 and PSO1
CO4	Application of the techniques of differentiation and integration to various economic analyses.	Ap	PSO3, PSO2 and PSO1

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Mathematical Methods for economics I: Credits 4: 4:0:0(Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	Understanding	PO1,	U	C	L	-

		the basic concepts, scope and nature of economics	PO2, PSO1				
CO2	Analyzing micro and macro models of economics and tools of economic analysis.	PO1, PO2, PO5, PSO1	An	P	L	-
CO3	Understanding the basic concepts of mathematics and their applications in Economics.	PO2, PO5, PSO3 and PSO1	U	C	L	-
CO4	Application of the techniques of differentiation and integration to various economic analyses.	PO2, PO5, PSO3, PSO2 and PSO1	Ap	P	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	3	-	-	-	-	-	3	2	-	-	-	-	-
CO 2	3	-	-	-	-	-	3	2	-	-	3	-	-
CO 3	-	1	3	-	-	-	-	3	-	-	3	-	-
CO 4	2	1	3	-	-	-	-	3	-	-	3	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar
- Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : **70**	Duration : **2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK1DSCAE101.1				
Course Title	ECONOMIC HISTORY OF INDIA				
Type of Course	DSC B/C				
Semester	I				
Academic Level	100-‑199				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites					
Course Summary	This course gives a historical background of the process of economic growth of India. From the colonial era to the modern globalized period, the course gives a brief sketch of the different events and factors that facilitated the economic growth of India over the decades.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Colonial India**	12
	1	Features of colonial India- Drain theory	
	2	Economic consequences of colonial rule.	
II		**Independent India and Development Experience**	12
	3	Gandhian and Nehruvian economic approaches	
	4	Rationale of economic planning- History of planning in India.	
	5	Context of the new economic reform.	
	6	Features of the globalized Indian economy	
III		**Macro Trends in Indian Economy**	12
	7	National Income determination, trends—History of Population Census	
	8	Trends in population growth- Trends in sectoral contribution to NI and employment- Poverty: estimation, measures- Unemployment: trends, types, measures-Inflation: estimation, trends, measures.	
IV		**Agricultural Industrial, and Service Sector**	12
	9	Agriculture: stages, policies, institutional reforms, technological reforms.	
	10	Rural credit, current issues in Indian agriculture.	
	11	Industrial policies, strategies, growth trends in the pre & post reform periods, growth of MSMEs, challenges to industrial development.	
	12	Growing importance of service sector, composition of service sector.	
	13	Policy measures adopted, challenges ahead.	
V		**Applications**	12
	14	Presentation on the pros and cons of colonial rule.	
	15	Discussion on India's prospects as a globalized economy	

	16	Debate on the factors that facilitated India's growth in the post-independence period	
	17	Discussion on the current situation of the agricultural sector in India	
	18	Evaluation of the infrastructural development in India.	

Reading List

Goyal, A. (ed.) (2019): A Concise Handbook of the Indian Economy in the 21st Century, Oxford University Press.

Sury, M.M (2016): Twenty Five Years of Economic Reforms in India-1991 to 2016, New Century Publications, New Delhi.

Bimal Jalan (2022) From Dependance to Self-Reliance: Mapping India's rise as Global Super Power

Additional Readings:

Uma Kapila (2013): Indian Economy since Independence, Academic Foundation, New Delhi.

Dutt, Ruddar and Sundaram (2018): Indian Economy, S Chand & Company, New Delhi.

Mishra, J K & V K Puri (2022): Indian Economy: The Development Experience, Himalaya Publishing House, Mumbai.

Mathew McCartney (2019), The Indian Economy, Cambridge University Press

Brahmananda, P. R. and V. A. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, Delhi.

Pulapre Balakrishnan, 2007, ―The Recovery of India: Economic Growth in the Nehru Era, Economic and Political Weekly, November 2007.

Basu, Kaushik : Structural Reforms in India, 1991-93, EPW, Vol. 28, Nov 1993**.**

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO-1	To understand the historical background of the economic growth of India.	An	PSO1, PSO2
CO-2	To examine the mechanisms of India's development during the post-independence period	U	PSO1, PSO2

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Economic History of India: Credits 4: 4:0:0(Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/Tutorial (T)	Practical (P)
CO-1	To understand the historical background of the economic growth of India	PO1, PSO1, PSO2	U	C	L	-
CO-2	To examine the mechanisms of India's development during the post-independence period	PO1, PSO1, PSO2	U	P	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO4	PSO5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	2	3	-	-	-	-	1	-	-	-	-	-	-
CO 2	2	3	-	-	-	-	2	-	-	-	-	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	Duration : 2 hours

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK1DSCAE102.1				
Course Title	PRINCIPLES OF ECONOMICS				
Type of Course	DSC B/C				
Semester	I				
Academic Level	100- -199				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	-				
Course Summary	Upon completion of this course the student will be well-familiar with the basics of microeconomics and macroeconomics. The course intends to lay a strong foundation on economic theory.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Introduction to Economics**	12
	1	What is Economics? Definitions	
	2	Importance of Economics- Deductive & Inductive method	
	3	Positive and Normative economics-Schools of thought	
	4	Central Economic Problem : Allocation of Resources, Efficient utilization of resources and Economic Growth- its nature and Importance in developing countries	
II		**Economic Systems**	12
	5	Economic Systems	
	6	Basics of Capitalism, Socialism, Mixed Economy	
	7	Market Economy and Third World Economies	
	8	Distinction between Micro and Macro Economics	
III		**Principles and Concepts of Microeconomics**	12
	9	Determinants of individual demand/supply	
	10	Demand/Supply schedule and demand/supply curve	
	11	Market versus individual demand/supply	
	12	Shifts in the demand/supply curve	
	13	Demand and Supply together	
	14	How Prices allocate resources	

	15	Equilibrium	
	16	Elasticity	
	17	Production – factors of production	
	18	TR, AR, MR	
	19	Costs–TC, AC, MC, OC–Short Run v/s Long Run costs	
IV		**Basics of Macroeconomics and Growth**	**12**
	20	The roots of macroeconomics - macroeconomic concerns	
	21	The role of government in the Macro economy	
	22	Components of the macro economy	
	23	Methodology of macroeconomics	
	24	Concepts of GNP, GDP, NNP, NDP and National Income – Personal Income and Disposable Income– Nominal and Real GDP – Limitations	
	25	Concept of Inflation, Deflation, Methods of calculation	
	27	Meaning of Development – Development v/s Growth	
	28	Problems of Growth – lessons and controversies	
V		**Applications**	**12**
	29	Presentation on the relevance of central economic problems in modern scenario	
	30	Debate on Capitalism v/s Socialism based on contemporary economic issues	
	31	Draw the market demand curve of a commodity in the local market and interpret based on the nature of the curve	
	32	Discussion on the current macroeconomic issues in India	
	33	Debate-Need for new methods of measuring development	

Reading List:

Stephen Dobson and Susan Palfreman, ―Introduction to Economics‖, Oxford University Press Samuelson, Paul A and William D Nordhaus ―Economics‖ (18th Edition), McGraw Hill

Walter Nicholson, Christopher Snyder Microeconomic Theory: Basic Principles and Extensions 11th Edition

Arvind Subramanian, 2012,―Growth Experience in K Basu and A Martens, The New Oxford Companion to Economics, Oxford University Press.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO 1	To provide an introduction to Economics and the various concepts.	U	PSO1, PSO2,
CO 2	To acquaint the students to one of the main branches of Economics, namely the Micro Economics.	U	PSO1, PSO2
CO 3	To familiarize the students with the basics of the other main branch of Economics, namely, the	An	PSO1, PSO2

	Macro Economics.			
CO 4	To expose the students to the branches of Economic Development and International Trade.	An		PSO1, PSO2

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Principles of Economics: Credits 4: 4:0:0(Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To provide an introduction to Economics and the various concepts.	PO1,PO2, PSO1, PSO2,	U	F	L	-
CO2	To acquaint the students to one of the main branches of Economics, namely the Micro Economics.	PO1,PO2, PO5, PSO1, PSO2	U	C	L	-
CO3	To familiarize the students with the basics of the other main branch of Economics, namely, the Macro Economics.	PO1,PO2, PO5, PSO1, PSO2	An	C	L	-
CO4	To expose the students to the branches of Economic Development and International Trade.	PO1,PO2, PO5, PSO1, PSO2	An	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7

CO 1	2	3	-	-	-	-	1	2	-	-	-	-	-
CO 2	2	3	-	-	-	-	2	1	-	-	2	-	-
CO3	2	3	-	-	-	-	1	2	-	-	1		-
CO4	2	3	-	-	-	-	2	1	-	-	1		-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	**ANALYTICAL ECONOMICS**				
Course Code	**MIUK1MDCAE103.1**				
Course Title	**HUMAN RESOURCE MANAGEMENT**				
Type of Course	**MDC**				
Semester	**II**				
Academic Level	100-199				
Course Details	**Credit**	**Lecture per week**	**Tutorial per week**	**Practical per week**	**Total Hours/Week**
	3	3 hours	-	-	3
Pre-requisites	-				
Course Summary	This course intends to equip the student with the basic concepts in human resource management. The aim of the course is to give an understanding about the work environment. The course also focuses on the recruitment process of an organization.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Introduction to Human Resource Management**	12
	1	Human resource management (HRM): evolution of the concept; meaning; scope- Functional areas of HRM	
	2	Organization of HR Departments -Role of HR managers-Emerging trends in HRM	
	3	Distinction between HRD and HRM	
	4	Concept of human capital	
II		**Human Resource Planning (HRP)**	12
	5	Essential characteristics of human resources- Human Resource Planning: meaning; nature; significance	
	6	Levels of HRP	
	7	Determinants of HRP	
	8	Steps in HRP(Process)- Limitations of HRP	
III		**Recruitment, Selection and Training of employees**	12
	9	Recruitment strategies: job analysis; job description; job specification	
	10	Selection: Meaning and steps	
	11	Training: Objectives and needs	
	12	Training process-Methods of training (on- the- job & off-the job)	

IV		Controlling Human Resources	12
	13	Promotion; Transfer; Demotion; Separation	
	14	Employee discipline: concept; features; types; objectives	
	15	Disciplinary Action Procedure: basic steps	
	16	Industrial Democracy: Meaning, objectives and forms	
	17	Workers 'Participation in Management in India – Collective Bargaining Framework in post-liberalised India	
V		Applications	12
	18	Debate on the role of HR in the changing business scenario	
	19	Presentation on the methods and challenges related to Human Resource Planning	
	20	Discussion on social security schemes for employees in India	
	21	Assignment on the historical perspective and problems of trade union movement in India	

Reading list

Armstrong, Michael.2013. A handbook of Human Resource Management. U.K: Kogan Page.
Aswathappa, K. 2007. Human Resource and Personnel Management: Text and cases. Tata, McGraw-Hill.New Delhi
Price, Alan. 2014. Principles of Human Resource Management. U.K: Blackwell.
Venkata Ratnam C.S.2003. Negotiated Change: Collective Bargaining, Liberalization and Restructuring in India, Response Books. New Delhi

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To expose the students to the basic concept and functions of Human Resource Management (HRM).	U	PSO1, PSO2
CO2	To acquaint the students with the significance of HR planning in efficient HRM	U	PSO1, PSO2
CO3	To appraise the students about the different techniques of recruitment, selection, and training of employees.	U	PSO1, PSO2
CO4	To provide the students an understanding of the disciplinary measures that can be taken to control Human Resource.	U	PSO1, PSO2

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Human Resource Management: Credits 3: 3:0:0(Lecture:Tutorial:Practical)

CO No.	CO	PO/ PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To expose the students to the basic concept and functions of Human Resource Management (HRM).	PO1, PO4, PO5, PSO1, PSO2	U	C	L	-
CO2	To acquaint the students with the significance of HR planning in efficient HRM	PO1, PO4, PO5, PSO1, PSO2	U	C	L	-
CO3	To appraise the students about the different techniques of recruitment, selection, and training of employees.	PO1, PO2, PO4, PO5, PSO1, PSO2	U	C	L	-
CO4	To provide the students an understanding of the disciplinary measures that can be taken to control Human Resource.	PO4, PO5, PSO1, PSO2	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	1	-	-	-	-	1	-	-	1	1	-	-
CO 2	1	1	-	-	-	-	1	-	-	1	1	-	-
CO3	1	1	-	-	-	-	2	2	-	2	2	-	-
CO4	1	1	-	-	-	-	-	-	-	2	2	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar
- Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	Duration : 2 hours

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	**ANALYTICAL ECONOMICS**				
Course Code	**MIUK2DSCAE150.1**				
Course Title	**INTRODUCTORY MICROECONOMICS**				
Type of Course	**DSC A**				
Semester	**II**				
Academic Level	100-199				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	Comprehensive understanding of the course Mathematical Methods for Economics I				
Course Summary	This course provides the basic principles of microeconomics including an introduction into the study of economics and analyzes the behavior of economic agents, particularly that of the individual and the firm. The course introduces the concept of utility and its practical application in order to understand consumer behavior and market equilibrium. It provides insights on firm's production, cost and revenue in the short run and long run.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Consumer Behaviour**	**15**
	1	Consumer behaviour—Cardinal Utility Analysis: Assumptions, Law of Equi-Marginal utility. Estimation using differential calculus.	
	2	Numericals on consumer equilibrium establishment	
	3	Ordinal Utility Analysis: Construction of Indifference curve, Properties of IC, Construction of Budget Line, Consumer equilibrium condition	
	4	Numerical and graphical analysis of consumer equilibrium	
	5	Revealed Preference Hypothesis	
	6	Consumer surplus: Cardinal and Ordinal measurement. Estimation using Integral calculus.	
II		**Demand and Supply Analysis**	**15**
	7	Law of Demand—Exceptions to the law of demand—Slope of the demand curve— Changes in demand— Derivation of demand curve	
	8	Elasticity of demand: Price elasticity—Types and measurement, Factors affecting price elasticity— Price effect, Income effect, Substitution effect-Income elasticity, Type of goods, Engel Curve--Cross	

		elasticity—Practical uses of the concept of elasticity	
	9	Mathematical treatment of Demand theory	
	10	Law of Supply—Changes in supply—Elasticity of supply and its practical uses	
	11	Market Equilibrium	
III		**Production**	**15**
	12	Production Function: Short run & Long run Production function	
	13	Production with one variable input labour---Production with two variable inputs (Isoquant- Isocost approach)---Production when all factors are variable-Producer Surplus-Expansion path	
	14	Cobb Douglas production function	
	15	Producer Equilibrium	
	16	Construction of Isocost lines and numericals on producer equilibrium	
IV		**Cost and Revenue**	**15**
	17	Types of cost incurred in production: Economic & Accounting cost, Opportunity cost, Sunk cost, Money & Real cost, Explicit & Implicit cost	
	18	Different concepts of cost in the short run and long run & their interrelations(Traditional and modern theories on cost)	
	19	Different concepts of revenue and their interrelations	
	20	Cost and revenue curves under different markets	
	21	Mathematical treatment of Production and Cost theory	
V		**Applications**	**12**
	22	Assessment and categorization of family budget. Graphical Representation of the same.	
	23	Numericals on Elasticity	
	24	Fitting production function using Indian industrial or agricultural database	
	25	Calculation of cost using industrial data	
	26	Additional workouts on concepts of revenue	

Reading List:

Salvatore, D (2008): Micro Economics: Theory and Practice, Oxford University Press.

Varian,H.R (2014): Intermediate Microeconomics: A Modern Approach. East West Press, New Delhi.

Pindyck, R.S & Rubinfeld, D.L (2022): Micro Economics, Pearson Education

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Analyzing the Cardinal. Ordinal and Revealed Preference	An	PSO 1 and

	theories of consumer behavior.			PSO3
CO2	Understanding the various aspects of demand and supply		U	PSO 1
CO3	Evaluating the types, measurement and practical uses of the concept of elasticity of demand and supply.		E	PSO 1 and PSO3
CO4	Analyzing the basic theories of production function both in the short run and long run and the Cobb Douglas production function.		An	PSO 1 and PSO3
CO5	Understanding the types of costs and revenue in production		U	PSO 1

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	Analyzing the Cardinal. Ordinal and Revealed Preference theories of consumer behavior.	PO1,PO2, PO5, PSO 1 and PSO3	An	P	L	-
CO2	Understanding the various aspects of demand and supply	PO1,PO2, PO5, PSO 1	U	C	L	-
CO3	Evaluating the types, measurement and practical uses of the concept of elasticity of demand and supply.	PO1,PO2, PO5, PSO 1 and PSO3	E	M	L	-
CO4	Analyzing the basic theories of production function both in the short run and long run and the Cobb Douglas production function.	PO1,PO2, PO5, PSO 1 and PSO3	An	P	L	-

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO5	Understanding the types of costs and revenue in production	PO1,PO2, PO5, PSO 1	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Introductory Microeconomics : Credits 4: 4:0:0(Lecture:Tutorial:Practical)

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	2	-	2	-	-	-	2	2	-	-	1	-	-
CO 2	2	-	-	-	-	-	2	2	-	-	1	-	-
CO3	3	-	2	-	-	-	2	2	-	-	1	-	-
CO4	3	-	2	-	-	-	2	2	-	-	1	-	-
CO5	3	-	-	-	-	-	2	2	-	-	1	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓
CO 5	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	**ANALYTICAL ECONOMICS**				
Course Code	**MIUK2DSCAE151.1**				
Course Title	**HISTORY OF ECONOMIC THOUGHT**				
Type of Course	**DSC B/C**				
Semester	**II**				
Academic Level	100- 199				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites					
Course Summary	The study of the history of economic thought intends to familiarize the students with the contribution of various schools of economic thought in the field of economic theory.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Early and Classical Economic Thought**	**12**
	1	Mercantilism-meaning-Factors responsible for the rise of mercantilism	
	2	Physiocrats- Natural order-primacy of agriculture-Tableau Economique	
	3	Features of Classical School- Contributions of Adam Smith, David Ricardo and Thomas R Malthus.	
II		**Neo Classical and Marginal Economic Thought**	**12**
	4	Contribution of Neo-classical school- Alfred Marshall	
	5	The Marginal Revolution- Jevons, Menger and Walras	
	6	The Historical School	
	7	The Institutional School	
III		**Keynesian and Post-Keynesian Economic Thought**	**12**
	8	The General Theory- Liquidity preference	
	9	Recommendations for economic policy	
	10	Rejection of Say's law and of laissez-faire doctrine	
	11	Economic Theory after Keynes- The Post-Keynesian School- New Keynesian School	
IV		**Indian Economic Thought**	**12**
	12	Early Indian economic thought	
	13	Chanakya's Arthashastra	
	14	Colonial Economic policies- Nationalist response, Swadeshi Movement	
	15	Economic ideas of M. G. Ranade, Dadabhay Naorojee, Gopal Krishna Gokhale, Dr. B. R. Ambedkar, M.K. Gandhi	

V		Applications	12
	16	Debate on Classical v/s Keynesian approaches	
	17	Assignment on economic thought before Mercantilism	
	18	Critical evaluation of recent economic articles	

Reading List

Eric Roll (1956): History of Economic Thought, 3rd , Englewood Cliffs, N.J. Prentice Hall, Inc, 1956
Goddanti Omkarnath (2016): Indian Development Thinking'from Handbook of alternative theories of economic development' Edited by Erik S. Reinert, Jayati Ghosh and Rainer Kattel
Dasgupta, Ajit K.(1993):A History of Indian Economic Thought, Routledge, London
Lokanathan,V (2013): A History of Economic Thought, S.Chand & Company Ltd, New Delhi

Additional Readings

Rangarajan, L.N. (2001): Kautilya – The Arthasastra, Penguin Books India Pvt. Limited, New Delhi
Ajit K. Dasgupta, Gandhi's Economic Thought, Routledge, London.
Blaug, Mark, (1997) Economic Theory in Retrospect, 5th Edition, Cambridge University Press, Cambridge, UK

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To understand the broad contours of Social Sciences, specifically Economics and to remember the origin and evolution of different schools of thought in Economics	U	PSO1 and PSO2
CO2	To evaluate the readings in Political Economy	E	PSO1 and PSO2

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

History of Economic Thought : Credits 4: 4:0:0(Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To understand the broad contours of Social Sciences, specifically Economics and to remember the origin and evolution of different schools of thought in Economics	PO1,PO2, PSO1 and PSO2	U	C	L	-
CO2	To evaluate the readings in	PO1,PO2, PSO1 and	E	M	L	-

	Political Economy	PSO2					

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	1	-	-	-	-	3	2	-	-	-	-	-
CO 2	2	1	-	-	-	-	3	2	-	-	-	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

▪ Quiz / Assignment / Discussion / Seminar
▪ Internal Exam
▪ Project Evaluation
▪ Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	**ANALYTICAL ECONOMICS**				
Course Code	**MIUK2DSCAE152.1**				
Course Title	**KERALA'S DEVELOPMENT EXPERIENCE**				
Type of Course	**DSC B/C**				
Semester	**II**				
Academic Level	100-199				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	-				
Course Summary	The aim of this course is to create awareness about the general issues and performance of Kerala economy, including agricultural development, industrial Sector, service sector and the State Finances				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Structure of Kerala Economy**	**12**
	1	Development experience of Kerala: An overview: Kerala's development since the formation of the state	
	2	Features of the Economy	
	3	Structural changes – Primary, Secondary and Tertiary Sectors – trends in the GSDP,NSDP and PCI- Government's financial challenges.	
	4	'Kerala Model of Development' -A comparison with the highest SDP state in India – HDI Status	
II		**Demographic Changes**	**12**
	5	Demographic Aspects (birth rate, death rate, infant mortality rate, sex ratio, age distribution)- Demographic transition- Occupational distribution.	
	6	Migration & Immigration: regional & international, NRI's and their contributions- Problem of unemployment: types, trends.	
	7	Trends in urban & rural poverty, measures.	
	8	Environmental issues in the state.	
III		**Kerala's Economic Development: Agricultural Sector**	**12**
	9	Trends in the production & productivity of major crops.	
	10	Progress of Land reforms	
	11	Land Use Pattern and Cropping Pattern	
	12	Relevance of plantation & cash crops- Impact of New Economic Reforms.	
	13	Need for organic farming – organic farming policy and initiatives	
	14	Agricultural Credit and Indebtedness	

IV		**Industrial and Service Sector**	12
	15	Traditional and Modern Industries in Kerala- Small Scale Industries and its prospects	
	16	Industrial backwardness of Kerala- Scope of MSMEs.	
	17	Status of Public sector industries in Kerala.	
	18	Role and importance of service sector	
	19	Education–Health–Tourism & IT sector.	
	20	Development of infrastructure facilities.	
V		**Applications**	12
	21	Debate on whether Kerala Model of Development is still relevant?	
	22	Discussion on the various aspects of women empowerment in the context of Kerala	
	23	Discussion on the challenges faced by farmers in Kerala	
	24	Assignment on the performance of Public sector industries in Kerala	
	25	Comparison of the performance of the health and education sectors in the South Indian states	

READING LIST

1. ""Economy of Kerala: Selected Essays" edited by K. P. Kannan

2. "Kerala Economy: Growth, Reforms, and Challenges Ahead" by G. A. Raveendran (2010)

3. "Economic Development of Kerala: A Study in Political Economy" by K. N. Raj (1990)

4. "Kerala's Economic Development: Issues and Problems" edited by K. P. Kannan and B. A. Prakash (2000)

5. "Kerala Model of Development: Insights and Concerns" edited by S. Irudaya Rajan and K. N. Nair (2000)

6. "Kerala's Gulf Connection: CDS Studies on International Labour Migration from Kerala" edited by K. C. Zachariah and S. Irudaya Rajan (2001)

7. "Kerala's Demographic Transition: Determinants and Consequences" edied by K. C Zachariah and S. Irudaya Rajan (2000)

8. "Kerala Economy: Performance, Problems, and Prospects" edited by K. P. Kannan and P.K. Michael Tharakan (2019)

9. State Finances in Kerala: A Decade after the Twelfth Finance Commission Award" by R. Mohan (2019)

10. "Kerala: The Dynamics of Fiscal Imbalances" by G. Venkatasubramanian and P.K Michael Tharakan (2017)

11. "Fiscal Reforms and Financial Sector Development in Kerala" edited by C.P. Chandrasekhar and K.P. Kannan (2015)

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To evaluate development strategies of Kerala since formation	E	PSO2, PSO5
CO2	To analyze demographic features of Kerala economy and its repercussions	An	PSO2, PSO5
CO3	To understand sectoral contribution and current	U	PSO5

	status of Kerala economy		

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Kerala's Development Experience : Credits 4: 4:0:0(Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To evaluate development strategies of Kerala since formation	PO1, PO2, PSO2, PSO5	E	P	L	-
CO2	To analyze demographic features of Kerala economy and its repercussions	PO1, PO2, PSO2, PSO5	An	C	L	-
CO3	To understand sectoral contribution and current status of Kerala economy	PO1, PO2, PSO5	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs:

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	-	3	-	-	2	-	3	2	-	-	-	-	-
CO 2	-	3	-	-	2	-	2	2	-	-	-	-	-
CO3	-	-	-	-	2	-	2	2	-	-	-	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	Duration : 2 hours

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	**ANALYTICAL ECONOMICS**				
Course Code	**MIUK2MDCAE153.1**				
Course Title	**BUSINESS JOURNALISM**				
Type of Course	**MDC**				
Semester	**II**				
Academic Level	100-199				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	3	3 hours	-	-	3
Pre-requisites	-				
Course Summary	This course deals with various aspects of business journalism and aims at acquainting the students with the skills to prepare and present business reports. This course also provides an overview of business journalism in the global, national and regional contexts.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Introduction to Business Journalism**	**12**
	1	Evolution of business and financial journalism-Ethics, Rules & Standards in Journalism	
	2	Overview of business journalism in the global, Indian & Kerala context	
	3	Scope & potential of business journalism in India	
	4	Major business dailies, magazines, Television media and web- based media	
	5	Reports by economic institutions- IMF, World Bank, RBI	
II		**Introduction to Frequently used Economic & Business Concepts**	**12**
	6	Economic growth – indicators – National Income concepts – Broad economic sectors	
	7	Price indices and inflation- dynamics of gold and oil prices	
		Capital Markets-Derivatives, Futures and Options Trading- SENSEX & Other Indices -Debt Markets Mutual Funds and Exchange Trade Funds- currency futures- concepts in monetary policy- Budgetary concepts	
	8	BOP concepts- foreign exchange rate- FOREX markets- foreign exchange r egimes	
	9	Government securities market- role and functions of RBI and SEBI	
III		**Business Reporting and Editing**	**12**

	10	Economic/Business data sources - Data Reporting	
	11	Steps involved in collection and analysis of facts and information – interviewing –editorial production	
	12	Language and style of writing	
	13	Fair practices in reporting	
IV		**Financial Statement Analysis**	**12**
	14	Presentation of financial figures in qualitative and graphical manner	
	15	Analysis of Balance Sheet and Profit and Loss Accounts	
	16	Financial manipulations and irregularities	
V		**Applications**	**12**
	17	An analysis of the budget report in any newspaper	
	18	Each student would select a theme in consultation with the faculty and submit a mini review journal on related articles	
	19	Discussion on the relevance of online media in business journalism	
	20	Presentation of an editorial on economically relevant topic	

Reading list

Bhattacharya, D.K, 2005. Human resource Planning, Excel Books, New Delhi

Marie Kinsey, 2019. Financial Journalism, Routledge. London

Tony Harcup, 2014. A Dictionary of Journalism, Oxford University Press Ibrahim Seaga Shaw, 2016. Business Journalism: A Critical Political Economy Approach, Routledge Keith Hayes, 2013. Business Journalism: How to Report on Business and Economics, Apress

Peter Kjaer, Tore Slaatta, 2007. Mediating Business: The Expansion of Business Journalism, Copenhagen Business School Press

Terri Thompson, 2000. Writing About Business – The New Knight–Bagehot Guide to Economics & Business Journalism, Columbia University Press

Keith J. Butterick 2015. Complacency and Collusion: A Critical Introduction to Business and Financial Journalism, Pluto Press

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To explain the evolution of economic thinking and its current perspectives	U	PSO2, PSO5
CO2	To familiarize economic news based on data and figures	U	PSO2, PSO5
CO3	To prepare and present business reports	U	PSO2, PSO5
CO4	To analyse the newsvalues and readability checks of business journals	An	PSO2, PSO5

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Business Journalism : Credits 3: 3:0:0(Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L) /Tutorial (T)	Practical (P)
CO1	To explain the evolution of economic thinking and its current perspectives	PO1, PO4, PO5, PSO2, PSO5	U	C	L	-
CO2	To familiarize economic news based on data and figures	PO1, PO4, PO5, PSO2, PSO5	U	C	L	-
CO3	To prepare and present business reports	PO1, PO4, PO5, PSO2, PSO5	U	P	L	-
CO4	To analyse the newsvalues and readability checks of business journals	PO1, PO4, PO5, PSO2, PSO5	An	M	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	-	2	-	-	2	-	2	-	-	3	1	-	-
CO 2	-	2	-	-	2	-	2	-	-	3	1	-	-
CO3	-	2	-	-	2	-	2	-	-	3	2	-	-
CO4	1	1	-	-	-	-	-	-	-	2	1	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar
- Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	Duration : 2 hours

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK3DSCAE200.1				
Course Title	INTERMEDIATE MICROECONOMICS				
Type of Course	DSC A				
Semester	III				
Academic Level	200- 299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	Comprehensive understanding of the course Introductory Microeconomics				
Course Summary	This course focuses on market structure and price-output determination in various markets . It also looks into factor pricing, i.e., how prices of factors (which are used to produce various commodities) are being determined in their respective markets. Likewise, various theories and concepts related to determination of factor prices like wages, rent, interest and profit are discussed in this course. Economics of uncertainty is also introduced in this course.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Markets**	18
II	1	Market-Competitive & Non-competitive markets	
	2	Perfectly competitive market: Features	
	3	Price-Output determination in both short run and long run	
	4	The efficiency of a competitive market.	
	5	Monopoly: Features, Price-Output determination	
	6	Monopoly power, Natural monopoly, Bilateral monopoly	
	7	Monopolistic Competition-Inter temporal Price discrimination and Peak-load pricing, Price-Output determination in both short run and long run	
	8	Oligopoly—Features—Collusive and Non-collusive oligopoly	
	9	Models of Oligopoly: Cournot, Kinked demand curve	
II		**Factor Pricing and Distribution**	10
	10	Theories of Factor Pricing—Marginal Productivity Theory of Distribution—Alternative Distribution Theories of Ricardo, Euler's Theorem (mathematical analysis), Adding up Problem	
	11	Determination of Rent: Ricardian view, Economic Rent, Quasi rent	
	12	Determination of Wage rate under perfect competition and imperfect competition	
	13	Theories of profit: Dynamic theory, Risk and Uncertainty Bearing theory and Innovation theory.	

III		**Economics of Uncertainty**	**10**
	14	Choice under uncertainty	
	15	Expected utility theory—Risk, Probability, Expected value, Variability	
	16	Decision making under risk	
	17	Preference towards risk	
	18	Methods of reducing risk: Diversification, Insurance	
V		**General Equilibrium**	**10**
	19	General equilibrium v/s partial equilibrium	
	20	General Equilibrium & Economic Efficiency-General Equilibrium Analysis—Efficiency in exchange— efficiency in production— Efficiency in product-mix	
V		**Applications**	**12**
	21	Workouts on equilibrium establishment (Perfect Competition)	
	22	Case study on identification of different products and their market structures.	
	23	Study of the current market scenario of an industry using both primary and secondary data (market survey and presentation)	
	24	Group discussion on trade unions and collective bargaining	
	25	Conduct a survey on risk preferences of their own family members and create a risk profile	

Reading List

Varian, H.R (2014): Intermediate Microeconomics: A Modern Approach, East West Press, New Delhi.

Salvatore, D (2008): Microeconomics: Theory and Practice, OUP.

Pindyck, R.S and Rubinfield, D. L (2022):Microeconomics, Pearson.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To understand the general idea about the perfect and imperfect markets.	U	PSO1 and PSO2
CO2	To examine the price and output determination in various markets.	E	PSO 1 and PSO2
CO3	To analyze the theories of factor pricing and distribution.	An	PSO 1 and PSO2
CO4	To understand the economics of uncertainty	U	PSO 1 and PSO2

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L) /Tutorial (T)	Practical (P)
CO1	To understand the general idea about the perfect and imperfect markets.	PO1,PO2, PO5,PO6, PSO1 and PSO2	U	C	L	-
CO2	To examine the price and output determination in various markets.	PO1,PO2, PO5,PO6,PSO 1 and PSO2	E	P	L	-
CO3	To analyze the theories of factor pricing and distribution.	PO1,PO2, PO5,PO6, PSO 1 and PSO2	An	M	L	-
CO4	To understand the economics of uncertainty	PO1,PO2, PO5,PO6, PSO 1 and PSO2	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Intermediate Microeconomics : Credits 4: 4:0:0(Lecture:Tutorial:Practical)

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	2	3	-	-	-	-	2	2	-	-	2	2	-
CO 2	2	3	-	-	-	-	2	2	-	-	2	2	-
CO3	3	2	-	-	-	-	2	2	-	-	2	2	-
CO4	3	2	-	-	-	-	2	2	-	-	2	2	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	Duration : 2 hours

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	**ANALYTICAL ECONOMICS**				
Course Code	**MIUK3DSCAE201.1**				
Course Title	**WELFARE ECONOMICS**				
Type of Course	**DSC B/C**				
Semester	**III**				
Academic Level	200- 299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites					
Course Summary	Various social welfare criteria are being examined in this course. A few important ones formulated by Pareto (Pareto's social welfare criterion), Kaldor- Hicks- Scitovsky (compensation criterion) are discussed in detail in this course.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Introduction to Welfare Economics**	**15**
	1	What is welfare economics?	
	2	Objectives of welfare state	
	3	Concerns of welfare economics	
	4	Value judgments in welfare economics - positive or normative?	
	5	Concept of social welfare	
II		**Theories of Welfare Economics**	**18**
	6	Criteria of Social Welfare: Bentham's criterion, Cardinalist criterion, Pareto Optimality criterion—Compensation criterion: Kaldor-Hicks and Scitovsky	
	7	Arrow's Impossibility Theorem	
	8	A K Sen's Social Welfare Function	
III		**Market Failure**	**8**
	9	State and markets	
	10	Market failures and public sector- public goods- externality- information asymmetry	
IV		**Social Security Measures**	**7**
	11	Insurance and social insurance: theory, practice and contemporary challenges	
	12	Pension economics	

	13	Social Assistance	
	14	Income inequality and poverty	
	15	Economics of happiness	
V		**Applications**	12
	16	Discussion on economic growth and welfare state	
	17	Debate: The relevance of welfare economics in the modern world	
	18	Identify the positive and negative externalities of a recent Public infrastructure project	
	19	Assignment on the social cost of insurance and redistribution	

Reading List

Barr, Nicholas, 2012. Economics of the Welfare State, 5th ed. Oxford University Press.

Spicker, Paul, 2014. Social Policy. Theory and Practice, 3rd ed. Policy Press.

Sandmo, Agnar, 1998. The welfare state: a theoretical framework for justification and criticism. Swedish Economic Policy Review 5 11-33

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Understand basic concepts, terminology and organizational principles of welfare	U	PSO1 and PSO2
CO2	Evaluating the theories on welfare economics	U	PSO 1 and PSO2
CO3	Analyze and compare different welfare provisions among countries: retirement pensions, health care, social assistance systems	An	PSO 1 and PSO2

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/Tutorial (T)	Practical (P)
CO1	Understand basic concepts, terminology and organizational principles of welfare	PO1,PO2, PO5, PSO1 and PSO2	U	C	L	-
CO 2	Evaluating the theories on welfare economics	PO1,PO2, PO5, PSO 1 and PSO2	U	C	L	-

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/Tutorial (T)	Practical (P)
CO 3	Analyze and compare different welfare provisions among countries: retirement pensions, health care, social assistance systems	PO1,PO2, PO5,PSO 1 and PSO2	An	M	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Welfare Economics : Credits 4: 4:0:0(Lecture:Tutorial:Practical)

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	2	2	-	-	-	-	1	2	-	-	1	-	-
CO 2	2	2	-	-	-	-	1	2	-	-	2	-	-
CO3	2	2	-	-	-	-	1	2	-	-	1		-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK3DSCAE202.1				
Course Title	MONEY AND MODERN BANKING				
Type of Course	DSC B/C				
Semester	III				
Academic Level	200- 299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites					
Course Summary	The study of Money and Modern Banking in Economics is concerned with the relationship of money to economic activities. The course aims to provide an introduction to the role of money, financial markets, financial institutions and monetary policy in the economy. The course is also looking into some of the key areas including the theory and practice of financial markets, monetary policy and banking and how their interactions affect the real world.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Money**	10
	1	Concept of money, Evolution of money, Crypto Currency	
	2	Functions of money	
	3	Monetary Standards: Metallic, Gold and Paper standards	
	4	Value of money—Demand for money: Classical, Keynesian and Monetarist approach—Supply of money: Definitions—Determinants of money supply	
	5	High powered money and money supply	
II		**Banking**	18
	6	Type and functions of Commercial Banks	
	7	Creation of credit—Balance Sheet of a commercial bank	
	8	Management of NPAs by commercial banks	
	9	Nationalization of commercial banks	
	10	Innovative functions-Investment functions—Foreign Exchange business	
	11	Functions of a Central Bank	
	12	Monetary policy: Objectives and credit control instruments	
	13	Role of Non- Bank Financial Institutions	
	14	Banking sector reforms in India.	

III		**Progress of Digitalization of Payment Mechanism in India**	10
	15	Mobile banking, Internet banking	
	16	Card facilities like Credit cards, Debit cards, Smart cards, Personal Identification Number (PIN)	
	17	Electronic Fund Transfer, Electronic Clearing Services, NEFT, RTGS, SWIFT and IFSC	
	18	Fintech-Embedded Finance-Open Banking	
	19	Future of Banking in the new digital world.	
IV		**Financial Inclusion Measures**	10
	20	Financial Inclusion: Definition, Advantages	
	21	Measures taken by Government and RBI: Rural Credit Co-operatives, RRBs, Urban Co-operative banks, Micro Finance, Self Help Groups, Mutual funds, Pension funds, Pradhan Mantri Jan-Dhan Yojana.	
V		**Applications**	12
	22	Assignment on the Indian currency system.	
	23	Discussion on measures to combat NPAs in India	
	24	Critical Evaluation of Monetary Policy Transmission	
	25	A debate on 'Has demonetization pushed India towards a cashless economy?'	
	26	Case study on the role of SHGs in ensuring financial inclusion in Kerala	

Reading List:

Ghosh and Ghosh: Fundamentals of Monetary economics, Himalaya Publishing House.

R R Paul: Monetary Economics, Kalyan Publishers.

S B Gupta (2007): Monetary Economic Institutions: Theory and Policy, Chand Co.

M Y Khan (2011): Indian Financial System, Tata McGraw Hill.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Understanding the concept, evolution, functions, and types of money and the approaches to the concept of demand for money and significance of money supply.	An	PSO1, PSO2, PSO3,PSO5 and PSO6
CO2	Analyzing the types, functions, and significance of commercial banking system including the latest additions to the functions of the commercial banks and the significant role played by the Central Bank	U	PSO1, PSO2, PSO3, PSO4,PSO5 and PSO6
CO3	Understanding various developments in the digital banking sector	U	PSO2 and PSO6

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	Understanding the concept, evolution, functions, and types of money and the approaches to the concept of demand for money and significance of money supply.	PO1, PO5, PSO1, PSO2, PSO3,PSO5 and PSO6	An	P	L	-
CO2	Analyzing the types, functions, and significance of commercial banking system including the latest additions to the functions of the commercial banks and the significant role played by the Central Bank	PO1, PO5, PSO1, PSO2, PSO3, PSO4,PSO5 and PSO6	U	M	L	-
CO3	Understanding various developments in the digital banking sector	PO1,PO5, PSO2 and PSO6	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Money and Modern Banking : Credits 4: 4:0:0(Lecture:Tutorial:Practical)

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	2	3	1	-	1	3	1	-	-	-	1	-	-
CO 2	2	3	1	1	1	3	1	-	-	-	2	-	-
CO 3	-	2	-	-	-	3	1	-	-	-	1	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom	Seminar	
3	Activity	Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	**ANALYTICAL ECONOMICS**				
Course Code	**MIUK3DSEAE203.1**				
Course Title	**MATHEMATICAL METHODS FOR ECONOMICS II**				
Type of Course	**DSE**				
Semester	**III**				
Academic Level	200- 299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	Thorough understanding of the course Mathematical Methods for Economics I				
Course Summary	The course is based on basic calculus and application to the discipline of Economics that would enable students to comprehend mathematical modeling techniques that can be applied to various economic scenarios/problems to find solutions.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Matrix Algebra**	12
		Meaning—Types—Properties	
		Matrix Operations: Addition, Subtraction and Multiplication	
		Determinants—Inverse of a matrix—Cramer's Rule—Rank of a Matrix	
II		**Input – Output Analysis**	12
		Meaning of input – output–Origin- Basics	
		Main features of analysis, Assumptions Leontief's static and dynamic model, limations.	
III		**Optimization Problem**	12
		Concept of optimal and extreme values, relative maximum and minimum	
		First and Second order conditions in relation to maxima, minima, Concepts of quasi- concavity, quasi-convexity.	
		Unconstrained optimization –first and second order conditions Linear homogeneous functions: Cobb -Douglas Function and Elasticity of Substitution	
		Lagrange Method of Constrained Optimization	
IV		**Dynamic analysis**	12
		Meaning of Dynamic analysis	
		Difference equations –Introduction, Definition and Classification of Difference equations	

		Linear Difference equations, Solution of Difference equations	
		Linear First-Order Difference equations with constant coefficient	
V		**Applications**	**12**
		Numericals realted to input-output analysis	
		Applications – Utility Maximization, Cost Minimization, Output Maximization	
		Applications of Difference equations in Economic Models	

Reading List

Allen, R.J.D (2008): Mathematical Analysis for Economics, Macmillan Press, London.
Dowling, E.T (2000): Introduction to Mathematical Economics, Schaum's Online Series, McGraw Hill, New Delhi.
Chiang, A.C (2017) : Fundamental Methods of Mathematical Economics, McGraw Hill.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To understand and apply the Calculus of functions widely and their application to Economics.	Ap	PSO3 and PSO1
CO2	To apply the operations of matrices and its application in economic analysis.	Ap	PSO3 and PSO1
CO3	To understand the concepts of differential equations and difference equations	U	PSO3, PSO2 and PSO1

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Mathematical Methods for Economics II : Credits 4: 4:0:0(Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To understand and apply the Calculus of functions widely and their application to Economics.	PO1,PO2, PO5, PSO3 and PSO1	Ap	P	L	-
CO2	To apply the operations of matrices and its application in economic analysis.	PO1,PO2, PO5, PSO3 and PSO1	Ap	P	L	-
CO3	To understand the concepts of differential equations and difference equations	PO1,PO2, PO5, PSO3, PSO2 and PSO1	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	-	3	-	-	-	1	2	-	-	2	-	-
CO 2	1	-	3	-	-	-	1	2	-	-	2	-	-
CO 3	1	1	3	-	-	-	1	2	-	-	2	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

▪ Quiz / Assignment / Discussion / Seminar

▪ Internal Exam

▪ Project Evaluation

▪ Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	**ANALYTICAL ECONOMICS**				
Course Code	**MIUK3VACAE204.1**				
Course Title	**ENVIRONMENT ECONOMICS AND DISASTER MANAGEMENT**				
Type of Course	**VAC**				
Semester	**III**				
Academic Level	200- 299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	3	3 hours	-	-	3
Pre-requisites					
Course Summary	The course introduces and discusses various environmental concepts, helps to understand the importance of the subject, various environmental issues and their impact on the economy.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**BASIC CONCEPTS**	**10**
	1	Basic Concepts of environmental economics: Sustainability- Carbon credit- Carbon neutrality- Green GDP- Resource scarcity- Euro Standard- Climate Smart Agriculture	
	2	Economy and ecology – ecology and ecosystem- Basic Ecology	
	3	Economy environment inter linkages- Air pollution- Water pollution- Pollution by solid wastes.	
II		**ENVIRONMENTAL POLICY TOOLS FOR ANALYSIS**	**10**
	4	Pigouvian Taxes and Effluent Charges- Tradable Permits	
	5	Environmental Valuation – Types of Economic Values – Non-Market Valuation Methods	
	6	Cost Benefit Analysis	
	7	Environmental challenges and policy in India	
III		**GLOBAL ENVIRONMENTAL ISSUES**	**6**
	8	Economics of Climate Change – Agreements and Institutions	
	9	Population Growth and the Environment	
	10	Trade and Environment	
	11	Concept and Measurement of Sustainable Development	
	12	Energy and environment	
IV		**DISASTER MANAGEMENT IN INDIA**	**7**

	13	Concept and Definitions (Disaster, Hazard, Vulnerability, resilience, Risk)	
	14	Hazard and Vulnerability Profile of India	
	15	Institutional Arrangements (Mitigation, DM Act and Policy, Plans, Programmes and Legislation)	
	16	Disaster management in India	
III		**Applications**	**12**
	11	Discussion on solutions for regional pollution issues	
	12	Debate on the impact of current developmental policies on the environment.	
	13	Presentation on recent treaties on environment	
	14	Presentation and discussion on the impact of environmental disasters and suggestion of various policy measures for effective disaster management in view of the latest incidents in Kerala.	

Reading List:

1. Hussain, M, Ahmed. 2000. Principles of Environmental Economics, Routledge, London and New York
2. Charles Kolstad, Intermediate Environmental Economics, Oxford University Press, 2nd edition
3. Carter, Nick 1991. Disaster Management: Disaster Manager's Handbook, Asiaan Development Bank, Manila Pilippiens.
4. Tom Tietenberg(2003), Environmental and Natural Resource Economics, Pearson Education, Chapter 3
5. Jonathan M. Harris and Brian Roach (2017): Environmental and Natural resource Economics: A Contemporary Approach, 4th Edition, Routledge.

Additional Reading:

1. Gupta Anil K, Sreeja S Nair, 2011 Environmental Knowledge for Disaster Management, NIDM, New Delhi
2. Karpagam M., Environmental Economics, Third Edition, Sterling Publishers Pvt. Ltd

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To understand various concepts of environmental economics and environmental issues.	An	PSO2, PSO5
CO2	To analyze the various environmental policy tools	An	PSO2, PSO5
CO3	To know the global environmental issues	U	PSO5,
CO4	To understand the process of Disaster Management in India	E	PSO5

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Environment Economics and Disaster Management : Credits 3: 3:0:0(Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO 1	To understand various concepts of environmental economics and environmental issues.	PO1, PO2, PO3, PSO2, PSO5	An	P	L	-
CO 2	To analyze the various environmental policy tools	PO1, PO2,PO3 , PSO2, PSO5	An	P	L	-
CO 3	To know the global environmental issues	PO1, PO2,PO3 ,PSO5	U	C	L	-
CO 4	To understand the process of Disaster Management in India	PO1, PO2,PO3 , PSO5	E	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	-	2	-	-	2	-	3	2	1	-	-	-	-
CO 2	-	2	-	-	1	-	3	2	1	-	-	-	-
CO 3	-	-	-	-	1	-	3	2	1	-	-	-	-
CO 4	-	-	-	-	1	-	3	2	1	-	-	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

▪ Quiz / Assignment / Discussion / Seminar
▪ Internal Exam
▪ Project Evaluation
▪ Final Exam
Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	**Assignment**	**Project Evaluation**	**End Semester Examinations**
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK4DSCAE250.1				
Course Title	INTRODUCTORY MACROECONOMICS				
Type of Course	**DSC A**				
Semester	IV				
Academic Level	200- 299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites					
Course Summary	This course provides a complete understanding of macroeconomic variables and key elements related to aggregate behavior of the economy. This course is tailoring a preliminary head start to understand the basic nuances of macroeconomic theory and provides a base to the next level.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**National Income Accounting**	12
	1	Circular flow of income: Two sector, Three sector and Four sector	
	2	NI concepts— Importance of estimating NI—Difficulties in the estimation of NI	
	3	Measurement of NI— Value Added method—Role of NSO— Measurement of NI in India—Limitations in the present system--GNP deflator	
	4	Social Accounting—Green Accounting	
II		**Classical Theory of Income, Output and Employment**	12
	5	Features of Classical school-Classical theory of Income, Output and Employment- Say's law of Market—Wage- Price flexibility and full employment	
	6	Classical Dichotomy—Neutrality and non-neutrality of money	
	7	Quantity theory of money (Fischer's version)-Money Illusion—Saving-investment equality	
	8	Keynes objection to Classical theory	
III		**Keynesian Theory of Income, Output and Employment**	12
	9	Keynesian economics—Keynesian theory of Income, Output and Employment	
	10	Simple Keynesian model of income determination—Keynesian Cross	
	11	Role of taxation and Government spending in NI determination	

	12	Determination of NI in the open economy	
IV		**Aggregate Demand**	**12**
	13	Consumption Function: Definition, Psychological Law of consumption (Absolute Income Hypothesis)	
	14	Concepts related to consumption function: APC, MPC, APS MPS	
	15	Factors determining consumption function: Subjective and Objective— short run and Long run consumption function: Empirical evidence	
	16	Consumption puzzle— Theories of consumption function: Relative, Permanent and Life Cycle hypothesis	
	17	saving function—saving paradox	
	18	Investment—Types: Gross, Net, Autonomous, Induced, Real, Financial	
	19	Determinants of investment—	
	20	Keynesian Investment Function—MEC and MEI	
	21	Multiplier	
	22	Accelerator	
	23	Super Multiplier	
V		**Applications**	**12**
	24	Presentation on annual NI estimates	
	25	Descriptive analysis of NI trend in India	
	26	Assignment on the criticisms raised against the classical theory of income, output, and employment.	
	27	Comparison of Classical and Keynesian approaches	
	28	Assessment of the Household Consumption Expenditure Survey 2022-23	
	29	Assignment on the graphical explanation of the accelerator theory	

Reading List

Dornbusch et.al (2018): Macro Economics, Tata McGraw Hill, New Delhi.

Mankiw, Gregory (2017): Macro Economics, Worth Publishers, NY.

Froyen, Richard. T (2018): Macro Economics, Dorling Kindersley, India.

Abel, Bernanke and Croushore (2013): Macroeconomics

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To analyze micro and macroeconomics and study the different types of macro-economic variables.	E	PSO1, PSO2 and PSO3
CO2	To understand the concept of national income and different methods of measuring it.	U	PSO1, PSO2 and PSO3
CO3	To remember the contributions made by classical economists in macroeconomics.	R	PSO1
CO4	To understand the concept and theories of consumption function.	U	PSO1 and PSO2
CO5	To examine the types and determinants of investment	U	PSO1

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Introductory Macroeconomics : Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To analyze micro and macroeconomics and study the different types of macro-economic variables.	PO1,PO2, PO5, PSO1, PSO2 and PSO3	E	M	L	-
CO2	To understand the concept of national income and different methods of measuring it.	PO1,PO2, PO5, PSO1, PSO2 and PSO3	U	C	L	-
CO3	To remember the contributions made by classical economists in macroeconomics.	PO1, PO5 and PSO1	R	F	L	-
CO4	To understand the concept and theories of consumption function.	PO1,PO2, PO5, PSO1 and PSO2	U	C	L	-
CO5	To examine the types and determinants of investment	PO1,PO2, PO5, and PSO1	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	3	2	1	-	-	-	2	1	-	-	1	-	-
CO 2	3	2	1	-	-	-	2	1	-	-	2	-	-
CO 3	3	-	-	-	-	-	2	-	-	-	1	-	-
CO 4	3	2	-	-	-	-	2	2	-	-	2	-	-
CO 5	3	-	-	-	-	-	2	2	-	-	2	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

▪ Quiz / Assignment / Discussion / Seminar

▪ Internal Exam

▪ Project Evaluation

▪ Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓
CO 5	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK4DSCAE251.1				
Course Title	STATISTICAL METHODS FOR ECONOMICS				
Type of Course	**DSC A**				
Semester	IV				
Academic Level	200- 299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites					
Course Summary	The course aims to develop skills in statistical analysis, which are commonly applied to understand and analyze economic problems. The course is an introduction to the essential statistical tools and their application in economics.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Tools for Statistical Analysis**	**8**
	1	Mean- Arithmetic mean, Harmonic Mean and Geometric Mean	
	2	Median, Mode	
	3	Range, Quartile Deviation	
	4	Standard Deviation---Bivariate & Multivariate	
II		**Probability**	**12**
	5	Concept—Rules of Probability: Additional and Multiplication theorem	
	6	Conditional Probability- Baye's theorem— Inverse Probability	
	7	Random variables: Discrete and Continuous	
	8	Probability distribution— Discrete distribution: Binomial distribution— Poisson Distribution	
	9	Continuous Distribution: Normal distribution.	
III		**Correlation and Regression analysis**	**14**
	10	Simple, Partial and Multiple correlation analysis	
	11	Scatter Diagram, Karl Pearson and Rank correlation coefficients	
	12	Uses of Correlation	
	13	Probable Error, Application of probable error in economics	
	14	Lorenz curve- Gini Coefficient	
	15	Regression analysis- Method of Least Squares—Lines of regression	
	16	Estimation of regression in a Univariate distribution	

	17	Relation between regression and correlation coefficients	
	18	Application in Economics	
IV		**Index Numbers**	14
	19	Definition—Construction of index numbers: Lasper's, Paasche's and Fisher's—Ideal index numbers	
	20	CPI, WPI—Purchasing power of money	
	21	Problems in the construction of Index Numbers	
	22	Tests of Index Numbers	
	23	Uses of Index Numbers	
	24	Base shifting-Splicing	
	25	Time Series Analysis	
31		**Applications**	12
	26	Compute descriptive statistics table based on a small survey	
	27	Calculation of correlation coefficient using real world data	
	28	Assignment on application of correlation and regression in economics.	
	29	Creating GDP data with a unified base for India for 30 years using base shifting/splicing	
	30	Assignment on economic applications of different probability distributions.	
	31	Exercises in Excel to find mean, median, standard deviation and correlation.	

Reading List

Oakshott Less (2012): Essential Quantitative Methods, Palgrave Macmillan, NY.

Gupta, S. P (2023): Statistical Methods, Sultan Chand & Sons, New Delhi.

Monga, G.S (2001): Mathematics and Statistics for Economics, Vikas Publishers, New Delhi.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To understand the measures of Central Tendency in order to interpret empirical data	U	PSO3
CO2	To apply the techniques of correlation and regression in economics.	A	PSO3
CO3	To create the different types of index numbers.	C	PSO3
CO4	To understand and apply the elementary theory of probability including probability distributions.	U	PSO3

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Statistical Methods for Economics: Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L) Tutorial (T)	Practical (P)
CO1	To understand the measures of Central Tendency in order to interpret empirical data	PO1,PO2, PO5, PO6, PSO3	U	C	L	-
CO2	To apply the techniques of correlation and regression in economics.	PO1,PO2, PO5, PO6, PSO3	A	P	L	-
CO3	To create the different types of index numbers.	PO1,PO2, PO5, PO6, PSO3	C	P	L	-
CO4	To understand and apply the elementary theory of probability including probability distributions.	PO1,PO2, PO5, PO6, PSO3	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	-	-	3	-	-	-	2	1	-	-	2	2	-
CO 2	-	-	3	-	-	-	2	1	-	-	2	2	-
CO 3	-	-	3	-	-	-	2	1	-	-	2	2	-
CO 4	-	-	3	-	-	-	2	1	-	-	2	2	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

▪ Quiz / Assignment / Discussion / Seminar
▪ Internal Exam
▪ Project Evaluation
▪ Final Exam
Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK4DSEAE252.1				
Course Title	GAME THEORY AND INFORMATION ECONOMICS				
Type of Course	**DSE**				
Semester	IV				
Academic Level	200-299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites					
Course Summary	The course is an introduction to the essential concepts in game theory and information economics. The course includes extensive discussion on strategy, various game forms and also the problem of adverse selection and moral hazard.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Normal Form Games**	12
	1	The normal form	
	2	dominant and dominated strategies-dominance solvability-mixed strategies	
	3	Nash equilibrium	
	4	symmetric single population games-applications	
II		**Extensive form games with perfect information**	12
	5	The game tree	
	6	strategies- sub game perfection	
	7	backward induction in finite games- commitment- bargaining- other applications	
III		**Extensive form games with imperfect information**	12
	8	Extensive form games with imperfect information	
	9	Strategies	
	10	beliefs and sequential equilibrium	
	11	Applications	
IV		**Information Economics**	12
	12	Adverse selection	
	13	moral hazard	
	14	signalling games	
V		**Applications**	12
	15	Numericals	
	16	Illustration of Prisoner's Dilemma	

	17	A case study based on market of lemons	

Reading List

Osborne, M. (2004). An introduction to game theory. Oxford University Press.

Varian, H.R (2000): Intermediate Microeconomics: A Modern Approach, east

West Press, New Delhi.

Salvatore, D (2008): Microeconomics: Theory and Practice, OUP.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Understand the basics of game theory and optimal decision making under interactive settings	U	PSO1
CO2	Introduce ideas related to asymmetric information among the interacting agents	U	PSO1
CO3	Application of game theory to analyze moral hazard, adverse selection and market signalling	A	PSO1

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Game Theory and Information Economics: Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L) /Tutorial (T)	Practical (P)
CO1	Understand the basics of game theory and optimal decision making under interactive settings	PO1, PO2, PO5, PSO1	U	C	L	-
CO2	Introduce ideas related to asymmetric information among the interacting agents	PO1, PO2, PO5, PSO1	U	C	L	-
CO3	Application of game theory to analyze moral hazard, adverse selection and market signalling	PO1, PO2, PO5, PSO1	A	M	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	3	-	-	-	-	-	2	2	-	-	1	-	-
CO 2	3	-	-	-	-	-	2	2	-	-	1	-	-
CO 3	3	-	-	-	-	-	2	2	-	-	1	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

▪ Quiz / Assignment / Discussion / Seminar
▪ Internal Exam
▪ Project Evaluation
▪ Final Exam
Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK4SECAE253.1				
Course Title	DATA SCIENCE FOR ECONOMICS				
Type of Course	SEC				
Semester	IV				
Academic Level	200-299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	3	1 hour	-	2 hours	3
Pre-requisites	Basic computer know-how and thorough understanding of the course Statistical Methods for Economics				
Course Summary	This course intends to familiarize students with the concept and importance of data science and various data sources in the Indian economy. The course also focuses on the applications of R language and machine learning in R				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Concept and Importance of Data science**	9
	1	Importance of empirical data analysis in economics	
	2	Concept and Importance of data science	
	3	Various type of data and their sources in Indian economy	
II		**R for data science**	8
	4	Basic concepts in R language	
	5	Vectors- Matrix- – list – data frame	
	6	Programming in R	
III		**Data visualization and Modelling**	6
	7	Basics of data visualization using ggplot2	
	8	Basic econometric analysis using R	
IV		**Machine learning in R**	10
	9	The concept of Machine Learning	
	10	Machine Learning in R	
	11	Uses of machine learning in Economics ---examples	
V		**Applications**	12
	12	Assignment on the various types and their sources in Indian economy	
	13	Assignment on creation of programming in R in various instances.	
	14	Assignment on the use of ggplot2 for data visualization	
	15	Assignment on the use and applications of machine learning in economics.	

Reading List:

Wickham, Hadley. And Grolemund, Garrett (2017) R for Data Science, O'Reilly Publishes, Bosten

Matloff, Norman. (2011) The Art of R Programming: A Tour of Statistical Software Design, No starch press, Sans Francisco

Kleiber, C. & Zeileis, A. (2008), Applied Econometrics with R, Springer.

Varian, H. (2018), 'Artificial Intelligence, Economics, and Industrial Organization', Working Paper No: 24839, National Bureau of Economic Research.

Varian, H. R. (2014), 'Big Data: New Tricks for Econometrics', Journal of Economic Perspectives 28(2), 3-28.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To understand the concept and importance of data science and various data sources in the Indian economy.	U	PSO1, PSO2, PSO3 and PSO4
CO2	To apply the various concepts of R language.	C	PSO1, PSO2, PSO3 and PSO4
CO3	To apply the basics of data visualization and basic econometric analysis using R	Ap	PSO1, PSO2, PSO3 and PSO4
CO4	To understand the concept of Machine Learning in R	U	PSO1, PSO2, PSO3 and PSO4

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Data Science for Economics : Credits 3: 1:0:2 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To understand the concept and importance of data science and various data sources in the Indian economy.	PO2,PO5,PO6, PSO1, PSO2, PSO3 and PSO4	U	C	L	-
CO2	To apply the various concepts	PO2,PO5, PO6, PSO1,	C	M	L	P

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
	of R language.	PSO2, PSO3 and PSO4				
CO3	To apply the basics of data visualization and basic econometric analysis using R	PO2,PO5, PO6, PSO1, PSO2, PSO3 and PSO4	Ap	P	L	P
CO4	To understand the concept of Machine Learning in R	PO2,PO5, PO6,PSO1, PSO2, PSO3 and PSO4	U	C	L	P

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	1	3	3	-	-	-	3	-	-	2	2	-
CO 2	1	1	3	3	-	-	-	3	-	-	2	2	-
CO3	1	1	3	3	-	-	-	3	-	-	2	2	-
CO4	1	1	3	3	-	-	-	3	-	-	2	2	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	Duration : 2 hours

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK4VACAE254.1				
Course Title	ECONOMICS AND PERSONAL FINANCE				
Type of Course	VAC				
Semester	IV				
Academic Level	200-299				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	3	3 hours	-	-	3
Pre-requisites					
Course Summary	This course aims to equip the students with basic knowledge in financial planning. The course also includes discussion on financial products and services.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Economics and Financial Planning**	12
	1	Role of Economics in personal finance- Difference between need and want- Scope of financial literacy	
	2	Introduction to saving -Financial freedom-Need for financial planning-Steps in financial planning	
	3	Key concepts in personal finance-Time value of money	
	4	Power of compounding and Rule of 72-Three pillars of investment	
II		**Financial Products and Services**	12
	5	Products of banking and securities markets-Retirement benefits schemes-National Pension Scheme- Insurance- Government bonds- Tax saving schemes- Small savings schemes- Post office savings account- Public Provident Fund- National Savings Certificate	
	6	Selection of appropriate financial products and services (based on risk, return, safety and liquidity-and tax implication).	
III		**Innovative Financial Products and Services**	12
	7	Crypto currency	
	8	Real Estate Investment Trusts	
	9	Mutual funds: ULIP, Systematic Investment Plan, Systematic Withdrawal Plan	
	10	Exchange Traded Funds	
	11	Crowd funding	
	12	Sovereign Gold Bond	

	13	Selection of appropriate financial products and services (based on risk, return, safety and liquidity, and tax implication).	
	14	Modes of Digital Payments-Banking Cards- Mobile Banking: UPI-Internet Banking: RTGS- NEFT- IMPS- E-wallet-Unstructured Supplementary Service Data- Aadhaar Enabled Payment System- Point of Sale	
IV		**Financial Fraud and Preventive Measures**	12
	15	Phishing- Ponzi schemes- Money laundering- Identity theft- Cyber trapping- Investment fraud- Tax evasion- Spoofing- Debit/ credit card fraud- Online payment fraud	
	16	Tips for preventing financial frauds- Authentication and Authorization (PIN, OTP, Biometrics etc.)- Data security and encryption	
	17	Highlights of RBI guidelines on digital payments and Customer- protection in unauthorized banking transactions.	
	18	Regulatory Bodies-RBI, SEBI, IRDAI and PFRDA and grievance redressal mechanisms.	
V		**Applications**	12
	19	Discussion on the need for financial planning	
	20	Do a survey among the students to assess their financial literacy	
	21	Students to share their awareness about financial frauds and the precautions they take, if any	

Reading List:

SEBI(2020) Financial Education, https://investor.sebi.gov.in/pdf/downloadable-documents/Financial%20Education%20Booklet%20-%20English.pdf

Robert E. Lawless(2010) The Student's Guide to Financial Literacy, Greenwood An Imprint of ABC-CLIO, LLC

Joan S. Ryan(2007) Personal Financial Literacy, South-Western Educational

Bernan(2008) Improving Financial Education and Awareness on Insurance and Private Pensions, OECD.

Kiyosaki, R. T. (2022). Rich Dad Poor Dad: What the Rich Teach Their Kids aboutMoney That the Poor and Middle Class Do Not!

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Acquire essential financial knowledge and skills enabling them to make informed financial decisions.	U	PSO1, PSO2, PSO3 and PSO5
CO2	Apply the concept of financial planning.	Ap	PSO1, PSO2, PSO3 and PSO5

CO3	Familiarise the traditional and innovative financial products and services.	U	PSO1, PSO2, PSO3 and PSO5

R-Remember, U-Understand, Ap-Apply, An-Analyze, E-Evaluate, C-Create

Economics and Personal Finance : Credits 3: 3:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	Acquire essential financial knowledge and skills enabling them to make informed financial decisions.	PO1,PO2, PO5, PSO1, PSO2, PSO3 and PSO5	U	F	L	-
CO2	Apply the concept of financial planning.	PO1,PO2, PO5, PSO1, PSO2, PSO3 and PSO5	Ap	P	L	-
CO3	Familiarise the traditional and innovative financial products and services.	PO1,PO2, PO5, PSO1, PSO2, PSO3 and PSO5	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	3	1	1	-	3	-	1	1	-	-	1	-	-
CO 2	3	1	1	-	3	-	1	1	-	-	1	-	-
CO3	3	1	1	-	3	-	1	1	-	-	1	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- ▪ Quiz / Assignment/ Quiz/ Discussion / Seminar
- ▪ Midterm Exam
- ▪ Programming Assignments
- ▪ Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK5DSCAE300.1				
Course Title	INTERMEDIATE MACROECONOMICS				
Type of Course	DSC A				
Semester	V				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	Comprehensive understanding of the course Introductory Macroeconomics				
Course Summary	This course discusses the definitions, evolution of money and various theories concerning the demand and supply of money. It also looks into inflation, unemployment and trade cycles. It also delves into the objectives and instruments of macroeconomic policies and their effectiveness.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Money, Prices and Interest Rates**	**15**
	1	Money: Definition, Evolution of Money, Functions—Value of money—Monetary standards	
	2	Quantity Theory of money: Fisher's, Cambridge version, Friedman's restatement	
	3	Demand for money: Liquidity Preference theory, Liquidity Trap	
	4	Supply of money: Definitions, Determinants of money supply, Money Multiplier—High-Powered Money	
	5	Pigou effect—Real Balance effect—Keynes effect—Real and Nominal interest rates—Fisher effect—	
	6	Indian Currency System.	
II		**Inflation**	**10**
	5	Inflation: Definition, Types—Headline and Core Inflation—Causes, Effects—Social cost of inflation—	
	6	Inflationary and Deflationary Gap analysis—Monetary and Fiscal measures of controlling inflation—Price index.	
	7	Unemployment: Definition, Types	
	8	Natural rate of unemployment—Phillips Curve: Short run and Long run	
	9	Stagflation.	
III		**Trade Cycle**	**13**

	10	Trade Cycle: Definition, Phases	
	11	Schumpeter's theory of trace cycle—Hick's theory of trade cycle	
	12	Control of trade cycle.	
IV		**Macro Economic Policy**	**10**
	1	Objectives of Macro Economic Policy	
	11	Monetary, and Fiscal policies: Objectives and Instruments	
	12	Effectiveness of monetary & fiscal policies using the ISLM.	
V		**Applications**	**12**
	13	Comparison of different approaches on money	
	14	An assessment of Inflation in India	
	15	Discuss the types of unemployment in India	
	16	Case study on real world examples of trade cycle	
	17	Assignment on the concept of ISLM.	

Reading List

Dornbusch et.al (2018): Macro Economics, Tata McGraw Hill, New Delhi.

Mankiw, Gregory (2017): Macro Economics, Worth Publishers, NY.

Froyen, Richard. T (2018): Macro Economics, Dorling Kindersley, India.

Abel, Bernanke and Croushore (2013): Macroeconomics

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To understand the evolution of money and the concepts related to the demand for and supply of money.	R	PSO1, PSO2, PSO3 and PSO6
CO2	To understand basic economic issues like inflation, unemployment and trade cycle.	U	PSO1, PSO2, PSO3 and PSO6
CO3	Analyzing the effectiveness of macroeconomic policies in tackling fundamental economic issues.	An	PSO1, PSO2, PSO3, PSO4, PSO5 and PSO6

R-Remember, U-Understand, Ap-Apply, An-Analyze, E-Evaluate, C-Create

Intrermediate Macroeconomics : Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To understand the evolution of money and the concepts related to the demand for and supply of money.	PO1,PO2, PO5, PSO1, PSO2, PSO3 and PSO6	R	C	L	-
CO2	To understand basic economic issues like inflation, unemployment and trade cycle.	PO1,PO2, PO5,PSO1, PSO2, PSO3 and PSO6	U	C	L	-
CO3	Analyzing the effectiveness of macroeconomic policies in tackling fundamental economic issues.	PO1,PO2, PO5, PSO1, PSO2, PSO3 and PSO5	An	P	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	3	1	1	-	-	3	1	1	-	-	2	-	-
CO 2	3	3	1	3	-	1	3	2	-	-	1	-	-
CO 3	3	1	2	-	3	-	3	3	-	-	2	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK5DSCAE301.1				
Course Title	ECONOMETRICS I				
Type of Course	DSC A				
Semester	V				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	Comprehensive understanding of the course Statistical Methods for Economics				
Course Summary	This course introduces econometrics by discussing the nature, scope, its application and usage. It exhibits how economic theory, statistical inference and mathematics are integrated to study various economic relationships. It helps examine the various methods of estimation and the attributes of a good estimator.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Introduction To Simple Linear Regression Model-Two Variable Case**	15
	1	Nature and scope of Econometrics- Methodology of Econometrics	
	2	Properties of Estimators- Least Square Estimation	
	3	R2 and Adjusted R2	
	4	Partial Regressive Coefficients- Estimation of model by method of ordinary least squares	
	5	Gauss Markov Theorem-- Derivation of Gauss Markov Theorem - BLUE	
	6	Goodness of Fit-Test of Hypotheses-Forecasting	
II		**Multiple Linear Regression Model And Violations Of Classical Assumptions**	12
	7	Multiple linear regression model -estimation -interpretation	
	8	Violations of Classical Assumptions: Consequences, Detection and Remedies- Multicollinearity- Heteroscedasticity-Serial Correlations.	
III		**Qualitative (dummy) Independent Variables**	10
	9	The nature of dummy variables	
	10	ANOVA Models	
	11	ANCOVA Models	

	12	Forecasting	
IV		**Simultaneous Equations Models**	**11**
	13	Introduction to Simultaneous Equation Models-Simultaneous Equation Bias	
	14	Simple Keynesian Income Determination	
	15	Identification Problem –Under Identification –Exact Identification, Over Identification - Rules for Identification – Order Condition, Rule Condition	
V		**Applications**	**12**
	16	An assignment on creation of a multiple regression model.	
	17	An assignment on the consequences of and the tests for serial Correlation	
	18	An assignment on testing of hypotheses using an appropriate problem.	
	19	A discussion on the scope and relevance of Econometrics.	

Reading List

D.N. Gujarati and D.C. Porter, Essentials of Econometrics, McGraw Hill, 4 th Edition, International Edition, 2009. Chapter 1

GMK Madnani, Introduction to Econometrics: Principles and Applications, Oxford & IBH Publishing Co, 8 thEdition, 2008. Chapter 1.

Christopher Dougherty, Introduction to Econometrics, Oxford University Press, 3 rd Edition, Indian Edition, 2007. Chapter 2.

Jan Kmenta, Elements of Econometrics, Indian Reprint, Khosla Publishing House, 2nd Edition, 2008

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Understanding of nature, scope and methodology of Econometrics.	U	PSO1, PSO2, PSO3 and PSO4
CO2	To understand the method of ordinary least squares and the application of properties of estimators.	An	PSO1, PSO2, PSO3 and PSO4
CO3	To analyze the various concepts of multiple linear regression model.	An	PSO1, PSO2, PSO3 and PSO4
CO4	To understand the basic violations of classical assumptions.	U	PSO1, PSO2, PSO3 and PSO4

R-Remember, U-Understand, Ap-Apply, An-Analyze, E-Evaluate, C-Create

Econometrics I: Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	Understanding of nature, scope and methodology of Econometrics.	PO1,PO2, PO5,PO6, PSO1, PSO2, PSO3 and PSO4	U	C	L	-
CO2	To understand the method of ordinary least squares and the application of properties of estimators.	PO1,PO2, PO5,PO6, PSO1, PSO2, PSO3 and PSO4	An	P	L	-
CO3	To analyze the various concepts of multiple linear regression model.	PO1,PO2, PO5,PO6, PSO1, PSO2, PSO3 and PSO4	An	P	L	-
CO4	To understand the basic violations of classical assumptions.	PO1,PO2, PO5,PO6, PSO1, PSO2, PSO3 and PSO4	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PS O5	PS O6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	2	3	2	-	-	1	2	-	-	3	3	-
CO 2	1	2	3	2	-	-	1	2	-	-	3	3	-
CO3	1	2	3	2	-	-	1	2	-	-	3	3	-
CO4	1	2	3	2	-	-	1	2	-	-	3	3	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment/ Quiz/ Discussion / Seminar
- Midterm Exam
- Programming Assignments
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	Duration : 2 hours

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK5DSCAE302.1				
Course Title	OPERATIONS RESEARCH				
Type of Course	**DSC A**				
Semester	V				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	Basic knowledge of business economics and mathematics				
Course Summary	This course develops the skill sets of learners in formulating and solving LPP and offers insights into the various operations research models and its importance in business decision.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Linear Programming**	**12**
	1	Linear Programming– Basic concepts	
	2	Formulations of Problems	
	3	Graphical Solutions	
	4	Simplex Algorithm	
II		**Transportation Models**	**12**
	5	North West Corner Rule	
	6	Least Cost Method	
	7	Vogels Approximation Method	
	8	Methods for Finding Initial Solution – Determination of Optimal Solution	
	9	Assignment Problems – Obtaining Optimal Solutions	
	10	Sequencing – Optimal Sequence Algorithm – (2, N), (3, N) and (M, N)	
III		**Network Models**	**12**
	10	Network Analysis – Fulkerson's Rule	
	11	Critical Path Method (CPM)	
	12	Program Evaluation Review Technique (PERT)	
IV		**Decision Theory**	**12**
	13	Concepts of Expected Monetary Value – Expected Value of Perfect Information and Expected Opportunity Loss	
	14	Risk and Uncertainty – Decision under Uncertainty using Laplace	
	15	Maximim – Minimax – Maximax – Minimin – Hurwicz and Savage methods	
V		**Applications**	**12**

16	A presentation on popular softwares used to apply operation research models	
17	Assignment on the relevance of operations research in the modern world	
18	Numerical Exercises	

Reading List

Gupta. P.K., Hira D.S (1990). Operations Research, Sultan and Sons, New DelBooks for Study
Swarup Kanti, Gupta and Man Mohan (1996). Operations Research. Sultan Chand and Sons, New Delhi.
Hiller, F. S. and Jliederman,G. (2017). Introduction to Operations Research, New Delhi, Tata Mc.Graw Hill
 Hamdy A Taha (2014). Operation Research: An Introduction, Pearson Education; 9th edition. .

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Predict and compare the outcomes of alternative decisions, strategies or controls	An	PSO3
CO2	Understand sequencing and assignment problems and develop algorithms	U	PSO3
CO3	Application of scientific methods to improve the effectiveness of operations, decisions, and management	Ap	PSO3

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Operations Research: Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/ PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	Predict and compare the outcomes of alternative decisions, strategies or controls	PO2, PO5, PO6, and PSO3	An	P	L	-
CO2	Understand sequencing and assignment problems and develop algorithms	PO2, PO5, PO6, and PSO3	U	C	L	-
CO3	Application of scientific methods to improve the effectiveness of operations,	PO2, PO5, PO6, and PSO3	Ap	M	L	-

	decisions, and management								

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PS O5	PS O6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	-	-	3	-	-	-	-	2	-	-	3	3	-
CO 2	-	-	3	-	-	-	-	2	-	-	3	3	-
CO 3	-	-	3	-	-	-	-	2	-	-	3	3	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

▪ Quiz / Assignment / Discussion / Seminar
▪ Internal Exam
▪ Project Evaluation
▪ Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK5DSEAE303.1				
Course Title	GENDER ECONOMICS				
Type of Course	**DSE**				
Semester	V				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	-				
Course Summary	This course examines economic development from a gender dimension and highlights the significance of gender equality in achieving developmental goals. It enables to foresee the contributions of women as active economic agents and strategies to empower women and reduce gender inequalities				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Gender and Development**	12
	1	Meaning and scope of gender economics; sex v/s gender; nature v/s nurture	
	2	Differences between men and women – biological, psychological, anthropological, sociological, political science and economic perspectives	
	3	Approaches to women, gender and development – welfare approach, Women in Development (WID), Gender and Development (GAD), Women and Development (WAD), the efficiency approach, Gender and the Environment (GED); mainstreaming gender equality; Ecofeminism	
	4	Gender demographics and status of women; Access to health, education and resources; Feminization of poverty	
	5	Millennium development goals; Sustainable development goals	
II		**Economics of Gender Differences**	12
	6	Economics as an Imperialist Science	
	7	Gender and Neoclassical economic theory; Gender bias in the theories of value and distribution; Intrinsic value paradox	
	8	Effects of minimum wage on covered (men) and uncovered (women) labour markets; Labour market equilibrium in the presence and absence of discrimination; Statistical discrimination	
	9	The efficiency wage theory of discrimination	
IV		**Woman as an Economic Agent**	12
	10	Household as an economic unit; Family & household labour	

	11	Measurement of women's work; Gender differences in usage of time	
	12	Gender and labour market	
	13	Contribution of women to National Income	
	14	Economic independence and decision making	
V		**Applications**	12
	15	Discussion on women's access to healthcare and education in India	
	16	Debate on the performance of India in Gender Development Index	
	17	Assignment on the role of gender in modern economic theories	
	18	Discussion on gender bias in labour market	

Reading List:

Jacobsen, Joyce (2007) , 'The Economics of Gender', Third Edition, Blackwell Publishers Ltd., UK

Momsen, J.H. (2004),Gender and Development, Routledge, London

Mukesh Eswaran (2014) 'Why Gender Matters in Economics', Princeton, NJ: Princeton University Press

Thakkar Usha & Desai Neera (2001), 'Women in Indian Society', National Book Trust, New Delhi, India

Nelson A Julie (2003) ,'Feminism Objectivity & Economics', Routledge, London

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To sensitize students on gender related issues and understand how common economic problems affect men and women differently	U	PSO1, PSO2
CO2	To assess relevant policy measures from a gender perspective	E	PSO1, PSO2
CO3	To understand the impact of gender in economic development	U	PSO1, PSO2
CO4	To study and analyze economic theories with gender lens	An	PSO1, PSO2

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Gender Economics : Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To sensitize students on gender related issues and understand how common economic problems affect men and women differently	PO1, PO7, PSO1, PSO2	U	C	L	-

CO2	To assess relevant policy measures from a gender perspective	PO1, PO7, PSO1, PSO2	E	P	L	-
CO3	To understand the impact of gender in economic development	PO1, PO7, PSO1, PSO2	U	C	L	-
CO4	To study and analyze economic theories with gender lens	PO1, PO7, PSO1, PSO2	An	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	2	-	-	-	-	-	1	-	-	-	-	1
CO 2	1	2	-	-	-	-	-	1	-	-	-	-	1
CO3	1	2	-	-	-	-	-	1	-	-	-	-	1
CO4	1	2	-	-	-	-	-	1	-	-	-	-	1

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

▪ Quiz / Assignment / Discussion / Seminar

▪ Internal Exam

▪ Project Evaluation

▪ Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓

CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	Duration : 2 hours

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK5DSEAE304.1				
Course Title	FINANCIAL ECONOMICS				
Type of Course	DSE				
Semester	V				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	-				
Course Summary	This course enables the students to have a comprehensive understanding of financial markets, especially that of India. Upon completion of the course the student will be familiar with the money market, capital market, its instruments and operations.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**An Overview of Indian Financial System**	12
	1	Growth and development of financial system in India	
	2	Regulatory and promotional institutions: RBI, SEBI, IRDA	
	3	Banking institutions: Commercial and Co-operative banks; Non-Banking Financial Institutions	
	4	Financial sector reforms in India: Banking sector reforms, Capital market reforms	
II		**Financial Markets**	12
	5	Money Market: Definition, Features	
	6	Instruments of money market: Call & Notice money, Treasury Bills, Commercial Bills, Commercial Paper, Certificate of Deposits.	
	7	Capital Market: Meaning and Structure—Primary and Secondary markets	
	8	Primary or New Issue Market: Functions, Intermediaries: Merchant bankers, Underwriters, Registrar & Share transfer agent, Bankers to the issue, Stock brokers	
	9	Instruments of Capital market: Preference Shares, Differed shares, Equities, Ordinary shares, Bonds and Debentures, Government Promissory Notes, Public Sector Bonds, Initial Public Offer—Dematerialization of shares—Functioning of Depositories	
	10	Secondary Market—Nature and functioning of stock exchanges—Settlement and Trading in stock exchange—Players in stock exchanges—Speculators—Bulls, bears, Lame Duck, Stag—Kerb Trading, Insider Trading—Listing of Securities.	

III		**Security Market Analysis**	12
	11	Market for derivatives: Futures/Forwards and options—SWAPS	
	12	Risk and return on securities—Types of risk	
	13	Security valuation—Constant growth model—P/E ratio	
	14	Technical analysis of the market—Dow theory—Elliot Wave theory.	
IV		**Indian Financial System**	12
	15	Structure of Indian Financial System	
	16	Organization and Management of Indian Stock Exchange--: NSE, BSE—Stock market indicators: SENSEX, NIFTY—Stock market operations: Over The Counter Exchange of India (OTCEI), Inter-connected Stock Exchange (ISE), Depositories in India: NSDL, CSDL	
	17	Development Financial Institutions—Pension and Provident Funds—National Pension System and Pension Funds Regulatory and Development Authority-—Mutual Funds, Venture Capital Funds—NBFIs, Chit Funds	
	18	Credit Rating Agencies in India: CRISIL, ICRI, CARE	
	19	Financial Sector Reforms—Narasimham Committee Report	
V		**Applications**	12
	20	Presentation on features and performance of various money market instruments	
	21	An assignment on the evaluation of the financial sector reforms.	
	22	An assignment on the performance of the derivatives market.	
	23	Discussion on Capital market participation in India	
	24	Presentation on Indian Stock Exchanges and their indices	

Reading List

Bhole L M (1999): Financial Institutions and Markets, Tata McGraw Hill, New Delhi. Khan M Y (1996): Indian Financial System, Tata McGraw Hill, New Delhi.

Gupta N K & Monika Chopra (2008): Financial Markets, Institutions and Services, Ane Books, India.

Singh Preeti (2009): Dynamics of Indian Financial System: Markets, Institutions and Services, Ane Books, New Delhi.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To analyze the financial system in India.	An	PSO1, PSO2, PSO3,PSO5 and PSO6
CO2	To understand the functioning of the financial markets and services.	U	PSO1, PSO2, PSO3, PSO4,PSO5 and PSO6
CO3	To understand the activities of the securities market.	U	PSO1, PSO2, PSO3, ,PSO5 and PSO6
CO4	To evaluate the Indian financial system.	E	PSO1, PSO2, PSO3,PSO5 and PSO6

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Financial Economics: Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To analyze the financial system in India.	PO1,PO2, PO5, PO6, PSO1, PSO2, PSO3,PSO5 and PSO6	An	P	L	-
CO2	To understand the functioning of the financial markets and services.	PO1,PO2, PO5, PO6, PSO1, PSO2, PSO3, PSO4, PSO5 and PSO6	U	C	L	-
CO3	To understand the activities of the securities market.	PO1,PO2, PO5, PO6, PO12, PSO1, PSO2, PSO3, ,PSO5 and PSO6	U	C	L	-
CO4	To evaluate the Indian financial system.	PO1,PO2, PO5, PO6, PSO1, PSO2, PSO3,PSO5 and PSO6	E	P	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PS O5	PS O6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	2	2	-	3	3	1	2	-	-	2	1	-
CO 2	1	2	2	-	3	3	1	2	-	-	2	1	-
CO3	1	2	2	-	3	3	1	2	-	-	2	1	-
CO4	1	2	2	-	3	3	-	2	-	-	2	1	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar
- Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS
Course Code	MIUK5SECAE305.1
Course Title	INVESTMENT AND PORTFOLIO MANAGEMENT
Type of Course	SEC
Semester	V
Academic Level	300-399

Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	3	3 hours	-	-	3

Pre-requisites	-
Course Summary	This course provides a broad overview of investment management, focusing on the application of finance theory and investment decision making by understanding risk-return trade-off.It also acquaints students with a basic introduction to portfolio theory and study various methods of modeling the risk associated with stock investment such as the capital asset pricing model and arbitrage pricing theory

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Investment and Security Valuation**	7
	1	Investment – definition – Nature and Characteristics– Investment process –Institutions and markets – Securities – money market instruments – investment vs. speculation	
	2	Risk-Return-Different types -Risk Measurement –- Total Risk- Systematic Risk- Use of Beta, Variance –Computation of Risk and Return- Risk Premium –Expected Return -Risk Return Trade Off	
	3	Valuation of Securities – Valuation of Bonds – methods of estimating Bond returns	
	4	Valuation of shares – discounted dividend models – PE ratio multiplier Model.	
II		**Capital Market Theories**	8
	5	Capital Market Theory – Capital Market Line (CML)– Security Market Line (SML) - Capital Asset Pricing Model (CAPM) – Arbitrage Pricing Theory (APT) -Zero beta Model	
	6	Multifactor Models	
	7	Security Valuation and APT - Empirical Tests of APT	
	8	Estimating Risk in a Multi-factor Setting	
III		**Portfolio theories**	8
	9	Measurement of Expected Risk and Return of Portfolio	

	10	Alternative Measures of Risk	
	11	Portfolio Theory – portfolio analysis- portfolio selection	
	12	Markowitz Portfolio Theory –single Index Model	
IV		**Portfolio Management**	10
	13	Passive Equity Portfolio Management Strategy Index	
	14	Portfolio Construction Techniques - Tracking Error, Methods of Index Portfolio	
	15	Investment Fundamental Active Strategies; Technical Strategies - Market Anomalies	
	16	Value vs. Growth Investments - Investor Behaviour and Stock Returns	
V		**Applications**	12
	17	Assignment on security market investment	
	18	Assignment on portfolio diversification	
	19	Seminar on Risk-return relationship	
	20	Case study analysis and presentation of best practices	

Reading List

Avadhani, V.A.Security Analysis and Portfolio Management. Himalaya Publishing House, Mumbai. 2008. Print.

Bhalla,V.K. Investment Management. New Delhi: S.Chand & co; Corporations, 2008.Print.

Fisher, E.Donald and Ronald J.Jordan, Security Analysis and

Portfolio Management, NewDelhi: PHI Learning, 2008. Print.

Goldman Sachs: Introducing GS Sustain, 2007

Kevin, S. Security Analysis and Portfolio Management. New Delhi. 2008. Print

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Understand the fundamental concepts, theories and opportunities of security market Investments	U	PSO1,PSO3,PSO 5 and PSO6
CO2	Develop the necessary skills for Investment in Security Market	Ap	PSO1,PSO3,PSO 5 and PSO6
CO3	Exposure to various strategies on portfolio management	U	PSO1,PSO3,PSO 5 and PSO6

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Investment and Portfolio Management: Credits 3: 3:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	Understand the fundamental concepts, theories and opportunities of security market Investments	PO1,PO2, PO5, PSO1,PSO3,PSO5 and PSO6	U	C	L	-

| CO2 | Develop the necessary skills for Investment in Security Market | PO2, PO5, PSO1,PSO3,PSO5 and PSO6 | Ap | M | L | - |
| CO3 | Exposure to various strategies on portfolio management | PO2, PO5, PSO1,PSO3,PSO5 and PSO6 | U | C | L | - |

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	-	1	-	3	2	1	2	-	-	2	-	-
CO 2	1	-	1	-	3	2	-	2	-	-	2	-	-
CO3	1	-	1	-	3	2	-	2	-	-	2	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar
- Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	**Assignment**	**Project Evaluation**	**End Semester Examinations**
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK6DSCAE350.1				
Course Title	INDIAN ECONOMY				
Type of Course	DSC A				
Semester	VI				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	-				
Course Summary	This course offers a detailed examination of the process of economic development that occurred in India from independence to the present period. The background of economic events, their strengths and weaknesses, the performance of the macro variables and that of the different sectors of the economy are discussed in detail.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Development Path of India**	15
	1	Indian economy in the global context- Structure and features of India economy-Post-Independence development strategies: Nehru-Mahalanobis model, Gandhian model, LPG model, PURA- A neo-Gandhian approach to development	
	2	Growth trends: National Income, Saving and Investment—Demographic features: population size, growth rate, sex composition, age composition, Infant Mortality rate—Demographic dividend: issues and challenges	
	3	Sectoral contribution to income and employment- Indian agricultural and industrial policy shifts.	
	4	Poverty: estimation,measures and programs—Unemployment: trends, types and programs—Inflation: estimation, trends and reasons.	
II		**Primary and Secondary Sector in India**	15
	5	Phases of agricultural development—Land reforms: objectives, measures and impact—Land use and cropping pattern—Green Revolution: need, techniques and effects	
	6	Agricultural productivity debate: Trends in the production and productivity of major crops—Rural credit—Agricultural marketing—Agricultural insurance—Social Security measures and PDS.	
	7	Industrial development debate: Phases of industrial development in India—Strategies of industrial development	
	8	Choices of industrial strategies: public vs private sector, capital goods vs	

		consumer goods, large vs small, import substitution vs export promotion strategy—Trends in the industrial growth during pre and post reform period	
	9	Growth of MSME: challenges and remedial measures.	
III		**Tertiary and External Sector**	10
	10	Debate on services led growth in India: Growth of tertiary sector in India	
	11	Contribution of services: Role of transport and communication, money and capital markets, insurance, education, health, Information and Communication Technology.	
	12	Growth of economic infrastructure facilities—Issues: physical and environmental—Growth of tourism—e-commerce	
	13	Self-reliance approach—BOP and trade: composition, direction and volume—Foreign exchange reserves.	
IV		**Indian Economy in the Post- Liberalization Era**	8
	14	Economic Crisis of 1990—New Economic Policy: features—First, second and third generation economic reforms in India.	
	15	Indusrial policy—Disinvestment policy and Privatization—Role of FIIs, FDIs and MNCs.	
V		**Applications**	12
	16	Analyze the demographic features of India.	
	17	Assess the current problems faced by Indian agriculture	
	18	Analyse the trends in the industrial growth of Indian states.	
	19	A comparison of the growth of health infrastructure in different states	
	20	Assignment on the flagship schemes to promote entrepreneurship in India.	

Reading List

Basu, Kaushik and Maertens, Annemie; A Concise Companion to Economics in India; OUP,2010.

Goyal A (Ed.) 2019. A Consice Handbook of the Indian Economy in the 21st century. Oxford University Press.

Mathew McCartney (2019), The Indian Economy, Cambridge University Press

Bimal Jalan (2022) From Dependance to Self-Reliance: Mapping India's rise as Global Super Power

Sury, M.M (2016): Twenty Five Years of Economic Reforms in India-1991 to 2016, New Century Publications, New Delhi

Additional Reading

Brahmananda, P. R. and V. A. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, Delhi.

Pulapre Balakrishnan, 2007, ―The Recovery of India: Economic Growth in the Nehru Era, Economic and Political Weekly, November 2007.

Uma Kapila (2013): Indian Economy since Independence, Academic Foundation, New Delhi.

Dutt, Ruddar and Sundaram (2018): Indian Economy, S Chand & Company, New Delhi.

Mishra, J K & V K Puri (2022): Indian Economy: The Development Experience, Himalaya Publishing House, Mumbai.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	Evaluate the features of Indian economy both general and demographic	E	PSO1, PSO2, PSO3, PSO4, PSO5 and PSO6
CO2	Analyze the growth pattern of Indian economy in the pre- colonial, colonial and pre-liberalization period	An	PSO1, PSO2, and PSO3
CO3	Understand the role of service sector and the different areas in the sector along with India's performance in the external sector.	U	PSO1, PSO2, PSO5 and PSO6
CO4	Understand the Indian economy in the post liberalization period	U	PSO1, PSO2, PSO3, PSO4, PSO5 and PSO6

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Indian Economy : Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	Evaluating the features of Indian economy both general and Demographic	PO1, PSO1, PSO2 and PSO5	E	M	L	-
CO2	Analyzing the growth pattern of Indian economy in the pre-colonial, colonial and pre-liberalization period	PO1,PSO1, PSO2, and PSO3	An	P	L	-
CO3	Understanding the role of service sector and the different areas in the sector along with India's performance in the external sector.	PO1,PSO1, PSO2 and PSO5	U	F	L	-
CO4	Understanding the Indian economy in the post liberalization period	PO1, PSO1, PSO2, PSO5 and PSO6	U	F	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	2	3	-	-	2	-	2	-	-	-	-	-	-
CO 2	1	3	-	-	-	-	2	-	-	-	-	-	-
CO3	1	3	-	-	3	-	2	-	-	-	-	-	-
CO4	2	3	-	-	2	1	2	-	-	-	-	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar
- Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK6DSCAE351.1				
Course Title	DEVELOPMENT ECONOMICS				
Type of Course	**DSC A**				
Semester	VI				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	-				
Course Summary	The course enables to understand the determinants of development It enables to assess the strength and weakness in developing an economy. It also provides the skill required to frame the developmental policies				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Basic Concepts of Development**	12
	1	Economic growth and economic development: Definitions and Distinctions	
	2	Characteristics of LDCs—Main obstacles to growth—Development Gap—Vicious Circle of Poverty	
	3	Dualistic Theories of Development	
II		**Tools of Measuring Development**	12
	5	Gross National Product—Per Capita Income	
	6	Social Indicators: Human Development Index, Physical Quality Life Index, Human Poverty Index, Happiness Index--Gender Development Index—Multi Dimensional Poverty Index—TAI, Green Index (India's rank in the above mentioned indices)	
	7	Basic Needs Approach	
III		**Theories of Development**	12
	8	Views of Development: Adam Smith, David Ricardo, T R Malthus, Karl Marx, Schumpeter	
	9	Growth models: Neoclassical model of Robert M Solow, Neo Keynesian model of Joan Robinson, Harrod- Domar model, Concept of endogenous growth.	
IV		**Approaches to Development**	12
	10	Rostow's stages of growth, Lewis theory of unlimited supply of labour, Fei-Rannis model, Leibenstein's critical minimum effort thesis, Big Push	

		theory	
	11	Balanced and Unbalanced growth theories	
V		**Applications**	**12**
	12	An assignment on the characteristics of LDCs	
	13	Trend analysis of India's performance in various development indices	
	14	Comparison of income inequality among different nations using Lorenz curve	
	15	Review report on existing case studies of any one development model	
	26	A presentation on the most applicable approaches to promote economic growth in India.	

Reading List:

Thirlwall, A. P (2011): Growth and Development with Special Reference to Developing Economies, Macmillan, U K.

Taneja, M.L and R M Myer (2014): The Economics of Development and Planning, Vishal Publishing Co, Punjab.

Todaro, Michael. P: Development in Third World, Longman Group Ltd, London.

Meier, G M (1995): Leading Issues in Economic Development, OUP, New Delhi. Kindleberger, C P (1977): Economic Development, 3rd ed., McGraw Hill, New York.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To enable the students to understand the concepts of growth and development, basic characteristics of LDCs, obstacles to growth and the Development Gaps.	U	PSO1, PSO2, PSO3, PSO5 and PSO6
CO2	To acquaint the students with the different methods of measuring economic growth and development and inequalities.	E	PSO1, PSO2, PSO3, PSO5 and PSO6
CO3	To expose the students to the theories regarding the views of development and the theories on the approaches to development.	C	PSO1, PSO2, PSO3, PSO5 and PSO6

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Development Economics : Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L) /Tutorial (T)	Practical (P)
CO1	To enable the students to understand the concepts of growth and development, basic characteristics of LDCs, obstacles to growth and the Development Gaps.	PO1,PO2, PSO1, PSO2, PSO3, PSO5 and PSO6	E	C	L	-
CO2	To acquaint the students	PO1,PO2,	An	P	L	-

	with the different methods of measuring economic growth and development and inequalities.	PSO1, PSO2, PSO3, PSO5 and PSO6				
CO3	To expose the students to the theories regarding the views of development and the theories on the approaches to development.	PO1,PO2, PSO1, PSO2, PSO3, PSO5 and PSO6	U	M	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	2	3	3	-	2	1	2	2	-	-	-	-	-
CO 2	2	3	3	-	2	1	2	2	-	-	-	-	-
CO3	2	3	3	-	2	1	2	2	-	-	-	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar
- Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)

1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK6DSCAE352.1				
Course Title	INTERNATIONAL ECONOMICS				
Type of Course	**DSC A**				
Semester	VI				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	-				
Course Summary	The course throws light on international trade theories and trade models. It reviews implications of international trade policies. It also looks into the basics of exchange rate determinations/				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**International Trade Theories**	12
	1	Trade as an engine of growth—Inter-regional and international trade	
	2	Theory of Absolute Cost Advantage—Comparative Advantage theory—Haberler's Opportunity Cost theory	
	3	Heckscher-Ohlin theorem—Leontief Paradox	
	4	Gains from trade: Static and Dynamic gains-Terms of Trade—Offer Curve—Community Indifference Curve— Production Possibility Curve	
II		**Trade Policy**	12
	5	Free Trade vs. Protection	
	6	Types of tariff and quota—Impact of tariff and quota under partial equilibrium analysis	
	7	Different non-tariff restrictions—Optimum tariff	
	8	Free trade and policy of tariff in relation to economic growth with special reference to India	
III		**Balance of Payment and Foreign Exchange rate determination**	12
	9	Foreign Exchange rate determination: Mint Parity Theory, Purchasing Power parity theory, BOP Theory	
	10	Exchange rate systems—Fixed and Flexible exchange rates— Managed Floating systems—Nominal, Real and Effective exchange rate—	
	11	Forward rate, Spot rate—Foreign Exchange Risks—Hedging and Speculation	
IV		**International Monetary and Trade System**	12
	12	IMF and International Liquidity Management	

	13	World Bank-WTO and World Trade System	
	14	Flow of foreign capital: MNCs, FDI, FII	
	15	India and International organizations: G20, SAARC, ASEAN, Quad, BRICS, IBSA, SCO IMF, and their impact on India's foreign trade.	
V		**Applications**	12
	16	Assignment on the application of H-O theorem in the Indian trade situation	
	17	Application: Debate on Free Trade v/s Protection	
	18	An assessment of India's membership in International associations/groups	
	19	An assignment on the measures adopted to correct deficit in the BoP before and after 1991.	
	20	Discussion on Financial crisis in emerging economies.	

Reading List

Salvatore, D (2013): International Economics, MacMillan Press Ltd, London.

Krugman, Paul et. Al. (2017). International Economics , Pearson.

Sodersten, Bo (1999): International Economics, Macmillan Press Ltd, London. Chacholiadas, M (2017): International Trade: Theory and Policy, McGraw Hill,

Dutt, Ruddar and Sundaram (2018): Indian Economy, S Chand & Company, New Delhi.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To understand the basic concepts related to international trade.	U	PSO1, SO2, PSO3 and PSO5
CO2	To evaluate the trade policies that influence the trading between countries.	E	PSO1, SO2, PSO3, PSO4 and PSO5
CO3	To analyze the Balance of Payment of the country and the exchange rate.	An	PSO1, SO2, PSO3 and PSO5
CO4	To evaluate India's position in the external sector.	E	PSO1, SO2, PSO3, PSO4 and PSO5

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

International Economics : Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To understand the basic concepts related to international trade.	PO1, PO2, PO5, PSO1, SO2, PSO3 and PSO5	U	C	L	-
CO2	To evaluate the trade policies that influence the trading between countries.	PO1, PO2, PO5, PSO1, SO2, PSO3, PSO4 and PSO5	E	M	L	-
CO3	To analyze the	PO1, PO2, PO5,	An	P	L	-

	Balance of Payment of the country and the exchange rate.	PSO1, SO2, PSO3 and PSO5				
CO4	To evaluate India's position in the external sector.	PO1, PO2, PO5, PSO2, PSO3, PSO4 and PSO5	E	M	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	2	2	2	-	3	-	2	1	-	-	1	-	-
CO 2	2	2	2	1	3	-	2	1	-	-	1	-	-
CO3	2	2	2	-	3	-	2	1	-	-	1	-	-
CO4	2	2	2	1	3	-	2	1	-	-	1	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar
- Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK6DSEAE353.1				
Course Title	PUBLIC ECONOMICS				
Type of Course	DSE				
Semester	VI				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	-				
Course Summary	The course introduces fundamental principles and functions of the Government, highlights the difference in the efficient provision of public and private goods, and the various public revenue and expenditure principles. The course also looks into the concept of Fiscal federalism and the nature of Centre- State relations in India.				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**Introduction to Public Finance**	12
	1	Meaning and Scope—Classical, Keynesian and Modern approach on Public economics	
	2	Public and Private Finance: Similarities and Dissimilarities	
	3	he Principle of Maximum Social Advantage	
	4	The changing role of government in modern economy	
	5	Market failures—Externalities—Type of goods: Public, Merit, Social and Club goods	
	6	Cost-Benefit Analysis	
II		**Public Revenue and Public Expenditure**	12
	7	Sources of public revenue: Tax and Non-Tax sources	
	8	Meaning and classification of taxes: Direct and Indirect tax, VAT, MODEVAT, CENVAT, GST, Progressive, Proportional and Regressive, Digressive taxes, Specific and Advalorem taxes—Merits and Demerits	
	9	Canons of taxation—Principles of taxation- Impact, Incidence and Shifting of taxes—Effects of taxation	
	10	Laffer Curve—Taxable capacity	
	11	Public Expenditure—Types of public expenditure—Canons of public expenditure	
	12	Theoretical analysis of public expenditure: Wagner hypothesis, Peacock Wiseman hypothesis, Collin Clark hypothesis	
	13	Effects of public expenditure	

III		**Public Debt and Budgeting**	12
	14	Classification of public debt—Internal and External Burden of Public Debt	
	15	Effects of public debt on Production and Distribution—Public Debt and Deficit Financing— Economic effects of Deficit Financing	
	16	Redemption of public debt—Debt management	
	17	Budget; Concept, Significance and Characteristics—Classification of budget	
	18	Budgetary process	
	19	Public Account—Consolidated Fund and Contingency Fund of India	
	20	Union Budget analysis	
IV		**Fiscal Policy and Fiscal Federalism**	15
	21	Fiscal policy: Functions and Instruments	
	22	Fiscal Federalism—Nature of Centre-State relationship—Gadgil formula, Mukherjee formula	
	23	Finance Commission--14thFinance Commission: Recommendations	
V		**Applications**	12
	24	Illustration of Cost- Benefit analysis using local area development policies/ programmes	
	25	A group discussion on the merits and demerits of various taxes in India.	
	26	Comparative study of Centre-State relationship between India and US with respect to sharing of economic resources	
	27	Presentation on State Budget of current financial year	
	28	Assignment on the reasons for the growth in India's public expenditure	

Reading List

Singh, S K (2010): Public Finance-Theory and Practice, S Chand, New Delhi. Hajela, T N (2010): Public Finance, Ann's Books, New Delhi.

Agarwal, R C (2015): Public Finance-Theory and Practice, Lekshmi Narayanan, Agra. Mithani, D M (1998): Modern Public Finance, Himalaya Publishing House, New Delhi. Tyagi, B P (1994): Public Finance, Jain Prakash Nath and Company, Meerut.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To understand the various approaches on public economics that strengthens the need for Government intervention in a market economy.	U	PSO1, PSO2, PSO3, PSO4 and PSO5
CO2	To analyze the sources of public revenue and the types and importance of public expenditure.	An	PSO1, PSO2, PSO3, PSO4 and PSO5
CO3	To understand the concept of public debt and budget	U	PSO1, PSO2, PSO3, PSO4 and PSO5
CO4	To evaluate the relevance of fiscal policy and fiscal federalism	E	PSO1, PSO2, PSO3, PSO4 and PSO5

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Public Economics : Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To understand the various approaches on public economics that strengthens the need for Government intervention in a market economy.	PO1, PSO1, PSO2, PSO3, PSO4 and PSO5	U	C	L	-
CO2	To analyze the sources of public revenue and the types and importance of public expenditure.	PO1, PO2, PSO1, PSO2, PSO3, PSO4 and PSO5	An	P	L	-
CO3	To understand the concept of public debt and budget	PO1, PO2, PSO1, PSO2, PSO3, PSO4 and PSO5	U	C	L	-
CO4	To evaluate the relevance of fiscal policy and fiscal federalism	PO1, PSO1, PSO2, PSO3, PSO4 and PSO5	E	P	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	2	2	2	1	2	-	2	-	-	-	-	-	-
CO 2	2	2	2	1	2	-	2	1	-	-	-	-	-
CO3	2	2	2	1	2	-	2	1	-	-	-	-	-
CO4	2	2	2	1	2	-	2	-	-	-	-	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar
- Internal Exam
- Project Evaluation

▪ Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	Duration : 2 hours

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK6DSEAE354.1				
Course Title	ECONOMETRICS II				
Type of Course	**DSE**				
Semester	VI				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	Thorough understanding of basic econometrics				
Course Summary	The course introduces Qualitative Response models with explanations of models relating to Discrete Binary Choice and Multinomial models including LPM, Logit, Probit and Censored Regression. The course also analyze the time series and panel data econometric modeling and forecasting techniques				

Detailed Syllabus:

Module	Unit	Content	Hrs
I		**General Linear Model (Matrix Approach)**	12
	1	Introduction to General Linear Model, Assumption, Properties	
	2	Derivation of Gauss Markov Theorem -BLUE	
	3	Estimation and Hypothesis Testing	
II		**Qualitative Response Models**	12
	4	Discrete Choice Models	
	5	Models for Binary Choice – The Linear Probability Model (LPM), Maximum Likelihood LOGIT and PROBIT Models	
	6	Multinomial LOGIT and PROBIT models	
III		**Dynamic Econometric Models**	12
	7	Role of Lags in Economics and the Reason for Lags	
	8	Auto- Regressive and Distributed Lag models –Koyck Model –Partial Adjustment Model –Adaptive Expectations Model	
	9	Causality in Economics – The Granger test	
IV		**Time Series And Panel Data Econometrics**	12
	10	Introduction to Time Series Data and Analysis	
	11	Stationarity –Unit Root Test -Co-integration Tests	
	12	Methods of Modelling Time Series Data –AR, MA and ARIMA	
	13	ARIMA---Non stationarity in Time series—spurious regression—tests and solutions	

	14	Introduction to Panel data	
V		**Applications**	12
	15	Presentation on assumption and properties of GLM	
	16	Numericals based on actual data	
	17	Assignment to find the MPC value for India for a period of 10 years using the OLS method.	

Reading List

Gujarati and Porter (2017) , Basic Econometrics, Sixth Edition, McGraw Hill, Inc.

Johnston, J. (1994), Econometric Methods, Fourth Edition, McGraw Hill Inc.

Greene, William (2012), Econometric Analysis, Seventh Edition, Pearson

Stock, James H. and Watson, Mark W. (2011), Introduction to Econometrics, First Edition, Pearson Education Inc.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To understand the econometric methodology for empirical quantitative analysis of data	U	PSO1, PSO2, PSO3 and PSO4
CO2	To get acquainted with the tools of Econometrics analysis for applied research in Economics.	An	PSO1, PSO2, PSO3 and PSO4
CO3	To understand the conceptual framework on which such analyses are based, supplemented by illustrative empirical applications.	An	PSO1, PSO2, PSO3 and PSO4

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Econometrics II : Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To understand the econometric methodology for empirical quantitative analysis of data	PO1, PO2, PSO1, PSO2, PSO3 and PSO4	U	C	L	-
CO2	To get acquainted with the tools of Econometrics analysis for applied research in Economics.	PO2,PO5, PSO1, PSO2, PSO3 and PSO4	An	P	L	-
CO3	To understand the conceptual framework on which such analyses are based, supplemented	PO2,PO5, PSO1, PSO2, PSO3 and	An	P	L	-

	by illustrative empirical applications.	PSO4				

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PS O5	PS O6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	2	1	3	3	-	-	2	2	-	-	-	-	-
CO 2	2	1	3	3	-	-	-	2	-	-	2	-	-
CO3	2	1	3	3	-	-	-	2	-	-	2	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar
- Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	**Assignment**	**Project Evaluation**	**End Semester Examinations**
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK6SECAE355.1				
Course Title	RESEARCH METHODOLOGY				
Type of Course	SEC				
Semester	VI				
Academic Level	300-399				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	3	3 hours	-	-	3
Pre-requisites	-				
Course Summary	This course describes the ethical issues in social science research and the present position of economic research. It covers data collection methods and different types of research design.It also discusses qualities of a good research report.				

I		**BASICS OF RESEARCH**	
	1	Motivation and Objectives – Research methods vs. Methodology	**6**
	2	Types of research: Descriptive. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical	
	3	Concept of applied and basic research process	
	4	Criteria of good research	
II		**RESEARCH FORMULATION**	**10**
	5	Defining and formulating the research problem--Necessity of defining the problem	
	6	Importance of literature review in defining a problem--Literature review: Primary and Secondary sources, reviews, monograph, patents, research databases, web as a source, searching the web, critical literature review	
	7	Identifying gap areas from literature and research database	
	8	Development of working hypothesis.	
III		**DATA COLLECTION AND ANALYSIS**	**10**
	8	Observation and Collection of data--Methods of data collection	
	9	Sampling methods	
	10	Data processing and analysis strategies and tools	
	11	Data analysis with statistical packages—Practical Applications	
	12	Hypothesis testing—Parametric and non-parametric test.	
IV		**INTERPRETATION AND REPORT WRITING**	**7**
	13	Meaning of Interpretation--Technique of Interpretation--Precaution in Interpretation	
	14	Significance of Report Writing--Different Steps in Writing Report, Layout	

		of the Research Report	
	12	Types of reports--Oral Presentation	
	13	Mechanics of Writing a Research Report	
	14	Precautions for Writing Research Reports.	
V		**Applications**	12
	15	Sample synopsis presentation	
	16	Collection of primary data using sample survey method	
	17	Case study report writing using secondary data	
	18	Introduction to SPSS	

Reading List

Garg, B.L., Karadia, R., Agarwal, F. and Agarwal, U.K., 2002. An introduction to Research Methodology, RBSA Publishers.

Kothari,C.R., 1990. Research Methodology: Methods and Techniques. New Age International. 418p.

Sinha, S.C. and Dhiman, A.K., 2002. Research Methodology, EssEss Publications.2 volumes.

Trochim, W.M.K., 2005. Research Methods: the concise knowledge base, Atomic DogPublishing. 270p.

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To Understand the motivation and objectives of research, the types of research and the criteria of good research.	U	PSO4
CO2	To Understand the steps to be followed in selecting the research problem.	U	PSO4
CO3	To Evaluate different methods for data collection and thebdifferent statistical packages available for data analysis.	E	PSO4
CO4	To Understand techniques of data interpretation and the different steps in writing a report.	U	PSO4

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Research Methodology: Credits 3: 3:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To Understand the motivation and objectives of research, the types of research and the criteria of good research.	PO1, PO6 and PSO4	U	C	L	-
CO2	To Understand the steps to be followed in selecting the research problem.	PO6 and PSO4	U	P	L	-

CO3	To Evaluate different methods for data collection and the different statistical packages available for data analysis.	PO6 and PSO4	E	P	P	-
CO 4	To Understand techniques of data interpretation and the different steps in writing a report.	PO6 and PSO4	U	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	-	-	-	3	-	-	2	-	-	-	-	3	-
CO 2	-	-	-	3	-	-	-	-	-	-	-	3	-
CO3	-	-	-	3	-	-	-	-	-	-	-	3	-
CO4	-	-	-	3	-	-	-	-	-	-	-	3	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar▪ Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK7DSCAE400.1				
Course Title	ADVANCED MICROECONOMICS				
Type of Course	DSC A				
Semester	VII				
Academic Level	400-499				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	Thorough understanding of Introductory and Intermediate Microeconomics				
Course Summary	The course provides a detailed understanding of the advanced topics in microeconomics. It discusses the Average Cost Pricing models, Limit-Pricing, Managerial Theories of the Firm and Behavioural Theory of the Firm.				

Module	Unit	Content	Hrs
I		**Average Cost Pricing**	12
	1	Neoclassical Theory of Firm: Marginalist controversy. Hall and Hitch – Full cost Pricing Principles, Gordon's Attack on Marginalism – Arguments for Marginalism.	
	2	Representative Model of Average-Cost Pricing: Mark-Up Rule, Comparison with Pure Competition	
	3	Prediction of the Average Cost Pricing theory in changing market conditions, Critique of Average Cost Pricing	
II		**Limit-Pricing**	12
	4	Bain's Limit Pricing Theory, Sylos Labini Model;	
	5	Franco Modigliani Model; Bhagwati Model and Pashigian Model	
III		**Managerial Theories of the Firm**	12
	7	Baumol's Theory of Sales and Revenue Maximisation	
	8	Marris Model of the Managerial Enterprise - Comparison with Baumol's model	
	9	Williamson's Model of Managerial Discretion	
IV		**Behavioural Theory of the Firm - Pricing with Market Power**	12
	10	Behavioural Theory of Cyert and March Models: Goals, Process and Uncertainty, A simple Model of Behaviorism.	
	11	Comparison with Traditional Theory and Critique	

	12	Capturing Consumer Surplus	
	13	Price Discrimination, Intertemporal Price Discrimination and Peak Loading Pricing, The Two-Part Tariff, Bundling: Relative valuation, Mixed bundling.	
	14	Advertising: Rule of Thumb for Advertising, Transfer pricing on the integrated firm.	
V		**Applications**	**12**
	15	Debate on Marginalism v/s Modern Pricing theories.	
	16	Arguments about applicability of different models in a given situation.	
	17	Case study on sales/revenue maximization.	
	18	Capturing CS&PS and survey on behaviour patterns based on demo market situation. (Recreation of actual market).	

Reading List

Salvatore, D (2008): Micro Economics: Theory and Practice, Oxford University Press.
Varian,H.R (2014): Intermediate Micro Economics: A Modern Approach. East West Press, New Delhi.
Pindyck, R.S & Rubinfield, D.L (2022): Micro Economics, Pearson Education

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To deepen the understanding of the microeconomics concepts with applications.	U	PSO1, PSO2
CO2	To strengthen the comparative and analytical skill on microeconomics.	An	PSO1, PSO2
CO3	To provide a platform to understand various logical reasons for fixing alternative objectives of the firms.	An	PSO1, PSO2

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Advanced Microeconomics : Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To deepen the understanding of the microeconomics concepts with applications.	PO1, PO2, PSO1 and PSO2	U	P	L	-
CO2	To strengthen the comparative and analytical skill on microeconomics.	PO1, PO2, PSO1 and PSO2	An	P	L	-
CO3	To provide a platform to understand various logical reasons for fixing alternative objectives of the firms.	PO1, PO2, PSO1 and PSO2	An	C	L	-

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	3	-	-	-	-	2	1	-	-	-	-	-
CO 2	1	3	-	-	-	-	2	1	-	-	-	-	-
CO3	1	3	-	-	-	-	2	1	-	-	-	-	-
CO4	1	3	-	-	-	-	2	1	-	-	-	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

▪ Quiz / Assignment / Discussion / Seminar▪ Internal Exam
▪ Project Evaluation
▪ Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK7DSCAE401.1				
Course Title	ADVANCED MACROECONOMICS				
Type of Course	DSC A				
Semester	VII				
Academic Level	400-499				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	4 hours	-	-	4
Pre-requisites	Thorough understanding of Introductory and Intermediate Macroeconomics				
Course Summary	The course provides a detailed understanding of the advanced topics in macroeconomics. It discusses the early and new growth models, the Real Business Cycle Theory and Exogenous Nominal Rigidity. It also explores the Microeconomics foundations of Incomplete Nominal Adjustment.				

Module	Unit	Content	Hrs
I		**Early Growth Models**	12
	1	Solow Growth Model – The impact of a change in the Saving Rate – Applications of Solow Model	
	2	Infinite Horizon and Overlapping Generations Models: The Ramsey-Cass-Koopmans Model – The Diamond Model	
II		**New Growth Theory**	12
	4	Research and Development Model: Determinants of the allocation of resources to R&D – The Romer Model	
	5	Time Series Tests of Endogenous Growth Models - Extending the Solow model to include Human Capital – Accounting for Social Infrastructure and Cross-Country Income Differences.	
III		**Real Business Cycle Theory and Exogenous Nominal Rigidity**	12
	7	Real –Business Cycle Theory, Money and Output, Assessing the Baseline Real Business Cycle Model	
	8	Price rigidity, Wage rigidity and departures from Perfect Competition in the Goods and Labor Markets	
	9	The cyclical behavior of Real Wage.	
IV		**Microeconomic foundations of Incomplete Nominal Adjustment**	12
	10	Imperfect competition and price setting– Real rigidity	
	11	Coordination-Failure Models and Real Non- Walrasian Theories - The Lucas imperfect information model	
	12	Rational expectations hypothesis, Random Walk Model	
	13	Inflation and Monetary Policy	

	14	Seigniorage and Inflation.	
V		**Applications**	12
	15	Debate on the widening income inequality in India.	
	16	Assessment of the nature of the labour market in India.	
	17	Conduct a study on inflation, based on primary/secondary data.	

Reading List

Dornbusch, R., Fischer, S., Startz, R. (2012), Macroeconomics, 9th edition, Tata McGraw-Hill Publishing Company Limited, New Delhi

Abel, A.B., Bernanke, B. S., Croushore, D. (2015), Macroeconomics, 8th edition, Pearson India Education Services Private Limited., Noida

Mankiw, N. Gregory (2015), Principles of Macroeconomics, 6 th edition, Cengage Learning India Private Limited, New Delhi

Romer, David (2011). Advanced Macroeconomics, 4th edition, McGraw-Hill, New York

Scarth, W.(2014), Macroeconomics: The Development of Modern Methods for Policy Analysis, Edwar Elgar Publishing Limited, Massachusetts

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To study the process of economic growth using growth models.	U	PSO1, PSO2
CO2	To analyse the allocation to research and development from the overall capital stock	E	PSO1, PSO2
CO3	To evaluate the labour force and the importance of human capital	An	PSO1, PSO2
CO4	To assess the impact of lack of coordination among the sellers in the market	E	PSO1, PSO2

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Advanced   Macroeconomics : Credits 4: 4:0:0 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To study the process of economic growth using growth models.	PO1, PO2, PSO1 and PSO2	U	C	L	-
CO2	To analyse the allocation to research and development from the overall capital stock	PO1, PO2, PSO1 and PSO2	E	C	L	-
CO3	To evaluate the labour force and the importance of human capital	PO1, PO2, PSO1 and PSO2	An	M	L	-
CO 4	To assess the impact of lack of coordination	PO1, PO2, PSO1 and	E	M	L	-

	among the sellers in the market	PSO2				

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PS O5	PS O6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	1	3	-	-	-	-	3	1	-	-	-	-	-
CO 2	1	3	-	-	-	-	3	1	-	-	-	-	-
CO3	1	3	-	-	-	-	3	1	-	-	-	-	-
CO4	1	3	-	-	-	-	3	1	-	-	-	-	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar ▪ Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓
CO 3	✓	✓		✓
CO 4	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	**Duration : 2 hours**

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

Mar Ivanios College (Autonomous)

Discipline	ANALYTICAL ECONOMICS				
Course Code	MIUK7DSEAE402.1				
Course Title	DATA ANALYTICS FOR ECONOMISTS				
Type of Course	DSE				
Semester	VII				
Academic Level	400-499				
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours/Week
	4	2 hours	-	2 hours	4
Pre-requisites	Thorough understanding of Research Methodology.				
Course Summary	The course explores the application of data handling and statistical programming skills.				

Module	Unit	Content	Hrs
I		**Data Mining**	12
	1	Basic Data Mining Tasks, Data Mining Versus Knowledge Discovery in Databases, Data Mining Issues, Data Mining Metrics	
	2	Social Implications of Data Mining, Data Mining from a Database Perspective	
II		**Big Data and Analytics**	12
	3	Analytics process model – Analytical profile requirements	
	4	Data sources – Data elements – Dealing with missing values – outlier	
	5	Standardizing data – Weights of evidence coding – variable selection	
III		**Predictive and Descriptive Analytics**	12
	7	Linear and logistic regression - Decision trees – Neural networks	
	8	Support Vector Machines – Ensemble methods – Multiclass Classification Techniques	
	9	Evaluating Predictive Models – Association Rules – Sequence Rules – Segmentation	
IV		**Predictive and Descriptive Analytics**	12
	10	Survival Analysis measurements - Kaplan Meier Analysis – Parametric Survival Analysis	
	11	Proportional Hazards Regression – Evaluating Survival Analysis Models	
	12	Social Network metrics and learning – Relational Neighbor Classifier - Relational Logistic Regression	
V		**Applications**	12
	13	Practical Sessions are provided in the Computer Lab	

Reading List

Bart Baesens (2014), Analytics in a Big Data World: The Essential Guide to Data Science and its applications, Wiley India Pvt. Ltd.

Margatret H. Dunham (2006), Data Mining – Introductory and Advanced Topics, Pearson Education

Arshdeep Bahga, Vijay Madisetti (2019), Big Data Science & Analytics: A Hands on Approach, Arshdeep

Mohiuddin Ahmed, Al-Sakib Khan Pathan, Taylor and Francis (2020), Data Analytics Concepts Techniques And Applications 1St Edition

Course Outcomes

No.	Upon completion of the course the graduate will be able to	Cognitive Level	PSO addressed
CO1	To enable the students to understand data mining and data analytics	U	PSO 3 PSO 4
CO2	To impart data handling and statistical programming skills based on real life example datasets	Ap	PSO 3 PSO 4

R-Remember, U-Understand, Ap-Apply, An-Analyse, E-Evaluate, C-Create

Data Analytics for Economists: Credits 4: 2:0:2 (Lecture:Tutorial:Practical)

CO No.	CO	PO/PSO	Cognitive Level	Knowledge Category	Lecture (L)/ Tutorial (T)	Practical (P)
CO1	To enable the students to understand data mining and data analytics	PO5, PO6, PSO 3 and PSO 4	U	C	L	-
CO2	To impart data handling and statistical programming skills based on real life example datasets	PO5,PO6, PSO 3 and PSO 4	Ap	M	-	P

F-Factual, C- Conceptual, P-Procedural, M-Metacognitive

Mapping of COs with PSOs and POs :

	PSO 1	PSO 2	PSO 3	PSO 4	PSO5	PSO6	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1	-	-	3	3	-	-	-	-	-	-	3	3	-
CO 2	-	-	3	3	-	-	-	-	-	-	3	3	-

Correlation Levels:

Level	Correlation
-	Nil
1	Slightly / Low
2	Moderate / Medium
3	Substantial / High

Assessment Rubrics:

- Quiz / Assignment / Discussion / Seminar▪ Internal Exam
- Project Evaluation
- Final Exam

Mapping of COs to Assessment Rubrics :

Mapping of COs to Assessment Rubrics :

	Internal Exam	Assignment	Project Evaluation	End Semester Examinations
CO 1	✓	✓		✓
CO 2	✓	✓		✓

Evaluation Pattern of the Course

End Semester Examinations	
Maximum Mark : 70	Duration : 2 hours

Internal Assessment Criterion

Sl. No.	Activity	Sub Category	Percentage (%)
1	Internal Test		10
2	Attendance		5
2	Classroom Activity	Seminar	
3		Quiz	15
4		Assignment	
	Total		30

MAR IVANIOS COLLEGE (AUTONOMOUS)
THIRUVANANTHAPURAM
Board of Studies in Department of Economics, History and Political Science
(Academic years: 2023-2026)

No.	Name	Designation/Office with phone no. and e-mail id	Category and Guidelines
1.	**LIJI D (Chairman)**	Assistant Professor &Head Dept. of Economics Mar Ivanios College Nalanchira Thiruvananthapuram - 695015 liji.d@mic.ac.in 9447858443	Head of the Department concerned
2.	**Ms. Amala Johnson**	Assistant Professor Dept. of Economics Mar Ivanios College Nalanchira Thiruvananthapuram-695015 amala.johnson@mic.ac.in 9562345440	Faculty member of the Department
3.	**Dr. Shaijumon C S**	Associate Professor & Head Department of Humanities Indian Institute of Space Science and Technology (ISST), Department of Space, Govt. of India. shaiju@iist.ac.in 9447493221	Subject expert from outside the parent University nominated by the Academic Council
4.	**Dr.Santhosh Kumar P K**	Director& Associate Professor in Economics, Centre for Budget studies Cochin University of Science and Technology, Kochi 682022. director.cbs@cusat.ac.in 9620569469	Subject expert from outside the parent University nominated by the Academic Council
5.	**Dr. Anitha V**	Professor & Head Department of Economics University of Kerala anitha.palavila@yahoo.com 9446361223	Subject expert from outside the college nominated by the Academic Council
6.	**Dr. Josukutty CA**	Professor, Department of Political Science Kariavattom Campus cajosukutty@gmail.com 9447145381	Subject expert from outside the college nominated by the Academic Council

7.	**Dr. Sajan Thomas**	Assistant Professor &Head Department of Political Science St. Johns College, Anchal Kollam meetsajan@gmail.com 8113056730	Subject expert from outside the college nominated by the Academic Council
8.	**Dr. Vimal Kumar C L**	Assistant Professor Department of History K.N.M Government Arts and Science College, Kanjiramkulam. tvmvimalkumar@yahoo.com 9446795768	Subject expert from outside the college nominated by the Academic Council
9.	**Vinod K Joseph**	Assistant Professor Department of History Government College for Women Thiruvananthapuram Vinodkjoseph5820@gmail.com 8086270831	Subject expert from outside the college nominated by the Academic Council
10.	**Dr Christabell P.J.**	Associate Professor, Department of Economics, University of Kerala, christabell@keralauniversity.a c.in 9497850893	Expert nominated by the Vice-Chancellor
11.	**Deepa Sarath**	Senior Partner at Ciber Digital consultants LLP NIPM, Thiruvananthapuram. deepa.sarath@cdcllp.com 9895236951	Representative from industry nominated by the Principal
12.	**Dr. Anoop S Kumar**	Assistant Professor Gulati Institute of Finance &Taxation Thiruvananthapuram. akumar.sasikumar @gmail.com 917510610605	Representative from allied areas nominated by the Principal
13.	Dr. Arathy S Nair	Assistant Professor, Department of Economics H.H.M.S.P.B.N.S.S College for women, Neeramankara.9497323494 arathysnair@gmail.com 9497323494	One member of the college alumni nominated by the Principal.

Chairman Board of Studies   **Principal**