GOA UNIVERSITY Taleigao Plateau, Goa 403 206

MINUTES

of the 3rd Meeting of the Standing Committee of

X ACADEMIC COUNCIL

Day & Date

13th August, 2021

<u>Time</u>

10.30 a.m.

Venue Council Hall Goa University

	by Charles Emmerson as Reference to the Course IRO-134 The Arctic in Global Politics.
	It was decided to set up a Committee to discuss regarding the Scheme of Examination for the Online Mode.
	(Action: Assistant Registrar Academic-PG)
D 3.4	Minutes of the Board of Studies in Skill Enhancement meeting held on 26/07/2021
	After discussion, the Standing Committee of the Academic Council approved the Structure and academic content of the Courses recommended by the Board of Studies.
	It was resolved to refer the proposals to the Directorate of Higher Education for its concurrence as they have financial implications due to increase/decrease in the workload of the teachers.
	(Action: Assistant Registrar Academic-PG)
D 3.5	Minutes of the Board of Studies in Physical Education meeting.
	The Standing Committee of the Academic Council referred the minutes along with
	the three-column format back to the Board of Studies.
	The Standing Committee of the Academic Council authorized the Vice-Chancellor to
	approve the same.
	(Action: Assistant Registrar Academic-PG)
D 3.6	Minutes of the Board of Studies in Biotechnology meeting held on 28/07/2021.
	The Standing Committee of the Academic Council approved the minutes of the
	Board of Studies in Biotechnology meeting held on 28.07.2021.
	(Action: Assistant Registrar Academic-PG)
D 3.7	Minutes of Meeting Board of Studies in Economics held on 10 th August, 2021
	The Standing Committee of the Academic Council approved the minutes of Board
	of Studies in Economics meeting held on 10.08.2021.
	(Action: Assistant Registrar Academic-PG)
D 3.8	Minutes of the Board of Studies in Konkani meeting held on 9 th August 2021
	through Online mode.
	The Standing Committee of the Academic Council approved the minutes of the
	Board of Studies in Konkani meeting held on 9 th August 2021 through Online mode.
	The Course 'Study of Konkani 'Tiatr'' i.e. KKO – 432 was withdrawn to be placed before the Board of Studies.
	(Action: Assistant Registrar Academic-PG)
D 3.9	Minutes of the Board of Studies in Commerce (UG)
	The Standing Committee of the Academic Council approved the minutes of the
I	Board of Studies in Commerce (UG).
	(Action: Assistant Registrar Academic-PG)

MINUTES OF BOARD OF STUDIES MEETING IN ECONOMICS HELD ON 10th AUGUST, 2021, AT 3.30 P.M

Vide Goa University notice dated 06/08/2021, the Board of Studies in Economics met online at 3.30 P.M. on Tuesday on 10th August, 2021. Since the number of members present represented the Quorum, the BOS began its proceedings.

Minutes are presented in the format.

Members present:

- 1. Dr. P.K. Sudarsan, Professor in Economics and Vice Dean (Research), Goa Business School Goa University(Chairperson)
- 2. Dr. S. M. Noronha, Professor in Economics, Goa Business School, Goa University.
- 3. Dr. Pranab Mukhopadhyay, Professor in Economics, Goa Business School, Goa University, Goa
- 4. Ms Heena Gaude, Assistant Professor, Department of Economics, Goa University, Goa
- 5. Dr. Christina D'Souza, Associate Professor, Govt College of Arts, Science and Commerce College, Khandola
- 6. Dr. Apoorva A Marate, Associate Professor, CES College of Arts & Commerce.
- 7. Dr.Purva Hegde Desai, Professor in Management, Goa Business School, Goa University

Members Absent:

- 1. Dr.Lira Menzes Gama, Associate Professor, Shree Damodhar College, Margao
- 2. Dr.Gervasio Mendes, Principal, Govt college of Arts & Science, Sanquelim, Goa
- 3. Dr. Danamanjari Sathe, Professor in Economics, Pune University.

Proceedings:

The Chairperson welcomed the members of the Board of Studies (BOS). The Chairperson introduced and explained the agenda for the present meeting. The Board transacted the following business:

Agenda Items:

- 1. Approval of prerequisites for the Course Techniques of Geo-spatial Analysis
- 2. A.O.B

PART A:

- i. Not on Agenda
- ii. BOS discussed, finalized and recommended the prerequisites for the Course Techniques of Geo-spatial Analysis 4 credits
- iii. Not on Agenda
- iv. Not on Agenda
- v. Not on Agenda
- vi. Not on Agenda
- vii. Not on Agenda
- viii. Not on Agenda

PART B	
i.	•
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Not on Agenda

ii. Not on Agenda

iii. Not on Agenda iv. Not on Agenda

v. Not on Agenda vi. Not on Agenda

PART C:

i. Not on Agendaii. Not on Agenda

PART D:

i. Not on Agenda

ii. Not on Agenda

PART E:

i. Not on Agenda

ii. Not on Agenda

iii. Not on Agenda

iv. Not on Agenda

A.O.B-

NIL

PART F:

1. Important Points/recommendations of BOS that require consideration/approval of Academic Council:

Approval of the prerequisites for the course 'Techniques of Geo-spatial Analysis' (Eco-0130) as 'the basic knowledge of Mathematics and Statistics'.

Date: 10th August, 2021

(Professor P.K.Sudarsan) Signature of the Chairperson

PART G: The remarks of the Dean of the Faculty:

a. The minutes are in order.

b. The minutes may be placed before the Academic Council with remark, if any.

c. Important points of the minutes which need clear policy decision of the Academic Council to be recorded.

Date: 10/08/2021		
Signature of the Dean		



Signature of the Dean with Date

GOA UNIVERSITY Taleigao Plateau

Sr. No.	THE MINUTES OF THE BOARD Control Description of the Function	Done	Not Done X	Remarks
A-(i)	Recommendation of Syllabus at UG level			NOA
(ii)	Recommendation of Syllabus at PG level	Done		
(iii)	Marking Pattern Unit wise for UG level			NOA
(iv)	Marking Pattern Unit wise for PG level			NOA
(v)	Detailed Distribution of Topics at UG level			NOA
(vi)	Detailed Distribution of Topics at PG level		-	NOA
(vii)	Model Question Papers for UG level			NOA
(viii)	Model Question Papers for PG level			NOA
B- (i)	Scheme of Examination at UG level	-17 K		NOA
(ii)	Panel of Examiners for UG level	1		NOA
(iii)	Panel of Feedback Evaluators for UG level			NOA
(iv)	Scheme of Examination at PG level		The statement of the	NOA
(v)	Panel of Examiners for PG level			NOA
(vi)	Review of Question Paper Set at all University Examinations			NOA
C-(i)	Reference books recommended for UG	3 5 5 5 5		NOA
(ii)	Reference books recommended for PG			NOA
D-(i)	General academic requirements at the PG Depts.			NOA
(ii)	Recommendation of Academic Audit		Bright Lating	NOA
	Committee and Status thereof	Labor 6	leg	
E(i)	Prescribed Textbooks for the UG level		*	NOA
(ii)	Name of the Publisher/Date of Publication-UG			NOA
(iii)	Prescribed Textbooks for the PG level	74. 4.4		NOA
(iv)	Name of the Publisher/Date of Publication-PG			NOA
F(i)	Declaration by the Chairman that the Minutes were read	Done		NOA

Signature of the Chairperson with date

Extract of the minutes of Standing Committee of Academic Council meeting held on 13th August 2021.

D 3.7 Minutes of Meeting Board of Studies in Economics held on 10th August, 2021.

The Standing Committee of the Academic Council approved the minutes of Board of Studies in Economics meeting held on 10.08.2021.

Programme: M.A. Economics

Course Code: ECO 0130

Title of the Course: Techniques of Geo-spatial Analysis

Number of Credits: 4 Total Contact Hours: 48

Effective from AY: 2021-22

Prerequisites for the Course:	The basic knowledge of Mathematics and Statistics	
Objective:	To introduce the students the technique of spatial data analysis and its applications in Economics	
Content:	Module 1: Use of spatial data in economic analysis- Introduction to QGIS - installing QGIS and its graphical user interface.	6 hours
	Module 2: Data Creation and editing formats Data formats- Interacting with data -inspecting, measuring and selecting data, Vector Data- attribute data, projections, creating shapefile, snapping, topology and data joins, Raster Data.	14 hours
	Module 3: Creating map and styling Styling raster layers- terrain, satellite images and landcover map, styling vector layers- simple maker, point line and polygon style- labeling - map creation- print layout.	14 hours
	Module 4:Spatial Analysis Analysing raster data- clipping, analysing elevation, terrain projections and raster calculator, Combining raster and vector data-converting between raster and vector and zonal statistics, Advanced raster and vector analysis with processing.	14 hours
Pedagogy:	Lectures/ tutorials/assignments/group activity	1
Reference/	-	4

Readings:	1. Andrew Cutts, Anita Graser(2018), Learn QGIS,	
Main reference	Your Step-by-step Guide to the Fundamental of QGIS 3.4, Packt Publishing,4th Edition, Livery Place, UK.	
	2. Quantum Geographic Information System (QGIS) training manual https://docs.qgis.org/3.10/en/docs/training_manual/index.html	
Additional Reference	3. Gary E. Sherman(2008), Desktop GIS mapping the planet with open source tools, Pragmatic Bookshelf, Raleigh, North Carolina Dallas, Texas.	
	4. Otto Huisman, Rolf A. de (2009), Principles of geographic information systems: an introductory textbook, The International Institute for Geo-Information Science and Earth Observation (ITC), Netherlands.	
	5. Kurt Menke et.al (2016), Mastering QGIS, Packt Publishing, Livery Place, UK.	
	6. Erik Westra (2014), Building Mapping Applications with QGIS Create Your Own Sophisticated Applications to Analyze and Display Geospatial Information Using QGIS and Python, Packt Publishing,4th Edition, Livery Place, UK.	
	7. Jay D. Gatrell, Ryan R. Jensen (2009), Planning and Socioeconomic Applications (Geotechnologies and the Environment), Springer Science & Business Media.	
	8. J. M. Pogodzinski, Richard M. Kos(2013), Economic Development & GIS, Esri Press.	
Learning Outcomes:	This course will enable the candidates to use spatial data for economic analysis. Candidates will be able to extract and process spatial images using open-source software for economic decision-making.	