COURSE OUTLINE

(1) GENERAL

SCHOOL	Royal Holloway Business School		
ACADEMIC UNIT	Faculty of Business and Law		
LEVEL OF STUDIES	Postgraduate		
COURSE CODE	MN5816	SEMESTER	Spring
COURSE TITLE	Business Analytics in Practice		

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, state the weekly teaching hours and the total credits*	WEEKLY TEACHING HOURS	CREDITS / ECTS
Credits are awarded for the whole course (module)	3	15 / 7.5
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail in section (4).		

COURSE TYPE *general background, special background, specialization, general education, skills development*	Specialisation, Skills development
PREREQUISITE COURSES	None
LANGUAGE OF INSTRUCTION AND OF ASSESSMENT	English
MODE OF TEACHING *in-person (%)* *synchronous distance learning (%)* *asynchronous distance learning (%)* *(In the case of synchronous distance learning, the total weekly duration of teaching is recorded)*	In-person 100%
AVAILABILITY TO ERASMUS STUDENTS	N/A
COURSE WEBSITE (URL)	https://aisbd.aegean.gr/en/c/business-analytics-practice

(2) LEARNING OUTCOMES

Learning Outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Brief Guide for drafting Learning Outcomes*

By the end of the course students should be able to:

LO1 Critically discuss the challenges and nuances of data interpretation drawing on data from published sources
LO2 Demonstrate data interpretation skills by employing them in the context of a realistic business/societal problem
LO3 Appraise different solutions to business problems by exploring the effects that different data interpretations may have on them
LO4 Communicate the outcomes of data analysis by presenting solutions in a manner accessible to a lay audience

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and are stated below), at which of the following does the course aim?

Search, analysis and synthesis of data and information, with the use of the necessary technology
Adaptability to new situations
Decision-making
Working independently
Team work
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project planning and management
Respect for difference and multiculturalism
Respect for the natural environment
Showing social, professional and ethical responsibility and sensitivity to gender issues
Criticism and self-criticism
Production of free, creative and inductive thinking
……
Other…
…….

Search, analysis and synthesis of data and information, with the use of the necessary technology
Decision-making
Working independently
Teamwork

(3) COURSE SYLLABUS

Module Description

The module aims to enhance student employability and impact on society by applying business analytics skills to real life business problems. The module provides a critical pedagogy with international experts to challenge student interpretations of data modelling and provide a context for the application of subject domain knowledge. Learning experiences are co-created using a partnership pedagogy to deliver high levels of student engagement in small, authentic learning environments, where students are encouraged to explore different interpretations and how they may introduce bias or be used to better understand and promote inclusivity and diversity. Students to an interdisciplinary ethos to create unique and original solutions to practice-based problems whilst learning to work with others in a collaborative environment using industry-based datasets.

Teaching Schedule

MN5816 Week	Topic
Week 01	Introduction to Business Analytics
Week 02	Why Business Analytics is Important.
Week 03	Data Visualisation Techniques
Formative Submission 1	Core Dataset Rationale Your with feedback your ability to identify and justify an appropriate dataset for your business analytics project, demonstrating critical evaluation of data sources and ethical awareness.
Week 04	Storytelling with Data
Week 05	Descriptive Analytics
Formative Submission 2	Data Preparation Documentation Your technical proficiency in data preparation, including cleaning, transformation, and documentation of your analytical process in Alteryx.
Week 06	Diagnostic Analytics
Week 07	Predictive Analytics

Formative Submission 3	Descriptive Analytics Your ability to conduct and communicate descriptive analytics, including appropriate statistical summaries, effective visualisations, and meaningful initial insights.	
Week 08	Prescriptive Analytics	
Week 09	Future Trends in Business Analytics	
Week 10	Course Review	

(4) TEACHING AND LEARNING METHODS - ASSESSMENT

MODE OF TEACHING *Face-to-face, distance learning, etc.*	Face-to-face
MODE AND FREQUENCY OF COMMUNICATION WITH THE STUDENTS	Face-to-face communication in weekly classes. Online communication through Moodle, Teams, and emails.
ENSURING THE MODE OF COMMUNICATION AMONG STUDENTS *Team assignments and discussions, collaborative learning platforms with the use of AI, video conference, QA sessions, κ.α.*	Teamwork in workshops. Discussion in Moodle Forums.
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, in laboratory training, in the communication with students*	Alteryx, Moodle, Microsoft Teams
TECHNOLOGICAL EQUIPMENT REQUIREMENTS	Audiovisual equipment for PowerPoint presentation
PLAGIARISM POLICY/ PLAGIARISM DETECTION TOOLS	Turnitin
ARTIFICIAL INTELLIGENCE POLICY *(1) The use of Artificial Intelligence is prohibited in all circumstances* *(2) The use of Artificial Intelligence is allowed only with the permission of the instructor* *(3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature* *(4) Students are free to use Artificial Intelligence*	(3) The use of Artificial Intelligence is allowed only with an explicit reference to the literature
ORGANISATION OF TEACHING *The mode and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, work placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artworks, etc.* *The student's study hours for each learning activity are stated, as well as the hours of independent study, according to the principles of the ECTS.*	
STUDENT ASSESSMENT *Description of the assessment method* *Language of assessment, methods of assessment, formative or summative*	Summative Assessment Weighting: 100% of total module grade Submission pack:

Activity	*Semester workload*
Lecture	20 hours
Seminar	10 hours
Guided Independent Study	120 hours
Course total	***150 hours***

assessment, multiple choice questions test, short answer questions, essay questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory assignment, clinical examination of patient, art interpretation, other *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	1). Artefact→ Alteryx Models (.yxzp) 2). 2,000-word Business Report 3). MN5819 Project Proposal (for Reference) Formative Assessment: Submissions of different summative assessment components in Weeks 3, 5 and 7. Assessment marking rubric available to students on Moodle.

(5) RECOMMENDED BIBLIOGRAPHY

Berinato, S. (2016) Good Charts: The HBR Guide to Making Smarter, More Persuasive Data Visualizations. Boston, Massachusetts: Harvard Business Review Press. Available at: https://ebookcentral.proquest.com/lib/rhul/detail.action?docID=7265990.

Cairo, A. (2013a) The Functional Art: An Introduction to Information Graphics and Visualization [electronic resource]. Berkeley, California: New Riders. Available at: https://ebookcentral.proquest.com/lib/rhul/detail.action?docID=7114798.

Clarke, E. (2022) Data Analytics, Data Visualization & Communicating Data - 3 Books in 1 [paperback]. Kenneth M Fornari.

Knaflic, C.N. (2019) Storytelling with Data: Let's Practice. New York: John Wiley & Sons Inc. Available at: https://ebookcentral.proquest.com/lib/rhul/detail.action?docID=5940216.