

Swansea University Prifysgol Abertawe

# FACULTY OF SCIENCE AND ENGINEERING

# UNDERGRADUATE STUDENT HANDBOOK

# YEAR 0 (FHEQ LEVEL 3)

# ACTUARIAL SCIENCE DEGREE PROGRAMMES

SUBJECT SPECIFIC PART TWO OF TWO MODULE AND COURSE STRUCTURE 2022-23

## DISCLAIMER

The Faculty of Science and Engineering has made all reasonable efforts to ensure that the information contained within this publication is accurate and up-to-date when published but can accept no responsibility for any errors or omissions.

The Faculty of Science and Engineering reserves the right to revise, alter or discontinue degree programmes or modules and to amend regulations and procedures at any time, but every effort will be made to notify interested parties.

It should be noted that not every module listed in this handbook may be available every year, and changes may be made to the details of the modules. You are advised to contact the Faculty of Science and Engineering directly if you require further information.

## The 22-23 academic year begins on 26 September 2022

Full term dates can be found here

### DATES OF 22-23 TERMS

26 September 2022 – 16 December 2022

9 January 2023 – 31 March 2023

24 April 2023 – 09 June 2023

## SEMESTER 1

26 September 2022 – 27 January 2023

## **SEMESTER 2**

30 January 2023 – 09 June 2023

### SUMMER

12 June 2023 – 22 September 2023

## **IMPORTANT**

Swansea University and the Faculty of Science of Engineering takes any form of **academic misconduct** very seriously. In order to maintain academic integrity and ensure that the quality of an Award from Swansea University is not diminished, it is important to ensure that all students are judged on their ability. No student should have an unfair advantage over another as a result of academic misconduct - whether this is in the form of **Plagiarism**, **Collusion** or **Commissioning**.

It is important that you are aware of the **guidelines** governing Academic Misconduct within the University/Faculty of Science and Engineering and the possible implications. The Faculty of Science and Engineering will not take intent into consideration and in relation to an allegation of academic misconduct - there can be no defence that the offence was committed unintentionally or accidentally.

Please ensure that you read the University webpages covering the topic – procedural guidance <u>here</u> and further information <u>here</u>. You should also read the Faculty Part One handbook fully, in particular the pages that concern Academic Misconduct/Academic Integrity. You should also refer to the Faculty of Science and Engineering proof-reading policy and this can be found on the Community HUB on Canvas, under Course Documents.

## Welcome to the Faculty of Science and Engineering!

Whether you are a new or a returning student, we could not be happier to be on this journey with you.

This has been a challenging period for everyone. The COVID-19 pandemic has prompted a huge change in society as well as how we deliver our programmes at Swansea University and the way in which you study, research, learn and collaborate. We have been working hard to make sure you will have or continue to having an excellent experience with us.

We have further developed some exciting new approaches that I know you will enjoy, both on campus and online, and we cannot wait to share these with you.

At Swansea University and in the Faculty of Science & Engineering, we believe in working in partnership with students. We work hard to break down barriers and value the contribution of everyone. Our goal is an inclusive community where everyone is respected, and everyone's contributions are valued. Always feel free to talk to academic staff, administrators, and your fellow students - I'm sure you will find many friendly helping hands ready to assist you.

We all know this period of change will continue and we will need to adapt and innovate to continue to be supportive and successful. At Swansea we are committed to making sure our students are fully involved in and informed about our response to challenges.

In the meantime, learn, create, collaborate, and most of all - enjoy yourself!

Professor Johann (Hans) Sienz Interim Pro-Vice Chancellor/Interim Executive Dean Faculty of Science and Engineering



Faculty of Science and Engineering		
Interim Pro-Vice Chancellor/Interim Executive Dean	Professor Johann Sienz	
Head of Operations	Mrs Ruth Bunting	
Associate Dean – Student Learning and Experience (SLE)	Professor Paul Holland	
School of Mathematics and Computer Science Head of School: Professor Elaine Crooks		
School Education Lead	Dr Neal Harman	
Head of Mathematics	Professor Vitaly Moroz	
Mathematics Programme Director	Dr Kristian Evans	
	Year 0 – Dr Zeev Sobol	
	Year 1 – Dr Noemi Picco	
Year Coordinators	Year 2 – Professor Jiang-Lun Wu	
	Year 3 – Dr Grigory Garkusha	
	Year 4/MSc – Professor Chenggui Yuan	

#### STUDENT SUPPORT

The Faculty of Science and Engineering has two **Reception** areas - Engineering Central (Bay Campus) and Wallace 223c (Singleton Park Campus).

Standard Reception opening hours are Monday-Friday 9am-5pm.

The **Student Support Team** provides dedicated and professional support to all students in the Faculty of Science and Engineering. Should you require assistance, have any questions, be unsure what to do or are experiencing difficulties with your studies or in your personal life, our team can offer direct help and advice, plus signpost you to further sources of support within the University. There are lots of ways to get information and contact the team:

**Email:** <u>studentsupport-scienceengineering@swansea.ac.uk (</u>Monday–Friday, 9am–5pm)

Call: +44 (0) 1792 295514 and 01792 6062522 (Monday-Friday, 10am–12pm, 2–4pm).

**Zoom:** By appointment. Students can email, and if appropriate we will share a link to our Zoom calendar for students to select a date/time to meet.

The current student webpages also contain useful information and links to other resources:

https://myuni.swansea.ac.uk/fse/coe-student-info/

#### **READING LISTS**

Reading lists for each module are available on the course Canvas page and are also accessible via http://ifindreading.swan.ac.uk/. We've removed reading lists from the 22-23 handbooks to ensure that you have access to the most up-to-date versions. Access to print material in the library may be limited due to CV-19; your reading lists will link to on-line material whenever possible. We do not expect you to purchase textbooks, unless it is a specified key text for the course.

### THE DIFFERENCE BETWEEN COMPULSORY AND CORE MODULES

Compulsory modules must be pursued by a student.

**Core modules** must not only be **pursued**, but also **passed** before a student can proceed to the next level of study or qualify for an award. Failures in core modules must be redeemed. Further information can be found under "Modular Terminology" on the following link - <u>https://myuni.swansea.ac.uk/academic-life/academic-regulations/taught-guidance/essential-info-taught-students/your-programme-explained/</u>

# Year 0 (FHEQ Level 3) 2022/23

# Actuarial Science

BSc Actuarial Science[N325]

Coordinator: Dr Z Sobol

Semester 1 Modules	Semester 2 Modules	
HUM105	MA-012	
Applied Critical Thinking	Analytical Techniques 3	
15 Credits	15 Credits	
Dr M Williams/Dr S Bevan/Mr G Palmer	Dr MK Pipelzadeh/Ms E Williams	
MN-0002	MA-022	
Business	Fundamentals of Programming	
15 Credits	15 Credits	
Mr EP Darling/Ms D Ball/Mrs PM Williams	Dr SJ Pratt/Mrs NSF Aldoumani	
MN-0006	MN-0501	
Interactive Learning Skills and Communication	Statistics	
15 Credits	15 Credits	
Ms CL Edwards/Mr EP Darling/Ms K Owen	Ms E Williams/Mrs S Lewis/Ms K Owen	
SCI101	MN-0502	
Analytical Techniques 1	Economics	
15 Credits	15 Credits	
Dr MG Jones	Mr SD Dolbear	
TC-0001		
The College Resilience module		
0 Credits		
Ms CL Edwards/Ms TA Jones/Ms K Owen/Mrs KM		
Roberts		
Total 120 Credits		

# HUM105 Applied Critical Thinking

## Credits: 15 Session: 2022/23 The College - Autumn Term (Sep - Dec)

Pre-requisite Modules:

**Co-requisite Modules:** 

Lecturer(s): Dr M Williams, Dr S Bevan, Mr G Palmer

Format: 11 x 2 hours lectures 11 x 2 hour seminar

**Delivery Method:** Delivery of this module will be through a series of lectures/seminars. All teaching is based on campus. Guest speakers may be invited to contribute as appropriate

**Module Aims:** The module provides students with the fundamental knowledge base and intellectual skills associated with thinking critically. This module provides an understanding of the basic requirements for building and consolidating a reasoned argument. Great focus is placed on the issue of the credibility of ideas and texts.

## Module Content: Week 1 - Introduction to critical thinking

An explanation of the meaning of critical thinking/ practical logic and its importance. Explanation of the difference between formal and informal logic. The application of critical thinking from everyday reasoning to expected standards of reasoning in academia. The use of metacognitive strategies in critical thinking. The importance of becoming a critical thinking disposition.

## Week 2 - Evidence and Assessing the credibility of evidence

Analysis of different kinds of evidence. The standard of authentic and valid evidence. Explanation of metacognitive strategies such as bias, their analysis and application. Development of criteria to assess the credibility of evidence.

### Week 3 - Resolving Disputes

Defining the kinds of disputes in question. An analysis of factual and verbal disputes. Analysis of the concept of a 'fact' contrasted with 'opinion'. The importance of truth and knowledge in resolving factual disputes. How to resolve verbal disputes as a result of vagueness and ambiguity.

Week 4 - Revision and in-class test Revision and test on weeks 1-3.

## Week 5 - Understanding argument

An analysis of the components of argument, how to identify the components and how arguments are constructed. The two main types of argument are considered are deductive arguments and inductive arguments showing the difference between necessary reasoning and probabilistic reasoning. Both kinds of arguments are explained and the strengths of each argument form are considered through illustrative examples.

### Week 6 - Extended Argumentation

Simple forms of argumentation are often combined to form larger, complex arguments. Extended argumentation will be analysed by detailing argument patterns in the form of diagrams.

## Week 7 - Assessing Argument

Deductive and inductive arguments are assessed for their validity and cogency though practical, everyday examples. The concept of a 'good argument' is explained and illustrated. Analysis of the concepts of irrelevance, logical consistency, assumption and selectivity/bias.

Week 8 - Examples for Discussion

Practical session using examples of simple and extended argumentation for students to analyse.

## Week 9 - Developing Arguments and Making Judgments

Specific strategies of argument development are considered e.g. counter-argument, counterexample and hypothetical reasoning. Problem setting, problem solving and goal-orientated thinking together with decision-making processes are discussed. Emphasis is placed on the importance of critical self-reflection.

### Week 10 - Fallacies

The flaws in common argument forms are considered through analysis of the traditional logical fallacies.

Week 11 - Revision and exam preparation

Week 12 - Exam

**Intended Learning Outcomes:** Define what is meant by critical thinking and be able to examine and comment component parts – in doing so being able to develop a structured response to the analysis of a particular argument being scrutinised.

Ability to identify and evaluate key informational resources for the analysis of discipline - related environments. Ability to identify and evaluate key aspects of the discipline in different contexts.

Ability to critically evaluate discipline-based analytical models and their impact within an operational framework. Ability to demonstrate the techniques of critical thinking in ways that relate to the topics being considered. Ability to prepare a researched and supported review of the main points associated with the examination of an applied argument.

Be able to identify and demonstrate the differences between a well-researched and analysed evaluation and one that is not.

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Assessment:	Examination 1 (50%)
	Examination 1 (50%)
	Examination 1 (50%)
	In class test (Invigilated on campus) (50%)
	In class test (Invigilated on campus) (50%)
	In class test (Invigilated on campus) (50%)
<b>Resit Assessment:</b>	Examination (Resit instrument) (100%)
	Examination (Resit instrument) (100%)
	Examination (Resit instrument) (100%)

Assessment Description: Class Test 1 – online test (week 7)

Examination - 1 x 2 hour unseen examination.

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback: Examination: Generic feedback via Blackboard plus drop-in session for students who would like individual feedback on their performance.

Coursework: Written feedback via Grademark

**Failure Redemption:** Candidates on standard delivery programmes (Foundation, Level 4, Pre-Masters) must accumulate 15 credits by the end of the second semester of their studies in order for their candidature of study to be continued. If a candidate does meet this requirement then they will be required to withdraw from their studies.

For standard delivery programmes (Foundation, Level 4, Pre-Masters, non-integrated programmes);

¿ At the discretion of The College Progression Board those candidates who fail a module in a given semester can be offered supplementary assessment(s) providing that the marks in the failed modules are no more than 15% below the pass mark.

 $\dot{c}$  Should the candidate fail the supplementary assessment(s) then, if eligible, they will be required to repeat the module in full (with attendance).

 $\dot{c}$  Candidates that do not qualify for supplementary assessment(s) will be required to repeat the entire module in full (with attendance).

 $\dot{c}$  Candidates can take a mixture of repeat modules, supplementary assessments and first sits of modules provided that the total module credits does exceed 95 credits, subject to any constraints in timetabling.

i If a candidate fails a repeat module (with attendance) then they will be permitted a supplementary final opportunity when the marks for the failed module(s) are no more than 15% below the pass mark. If a candidate does meet this threshold they will be required to withdraw from their studies.

¿ Candidates must satisfy attendance and assessment requirements of all modules. Candidates whose attendance or progress is unsatisfactory would normally be reported to the University Progression and Awards Board.

Additional Notes: This module is only available to students studying the relevant programmes within The College, Swansea University

# MA-012 Analytical Techniques 3

## Credits: 15 Session: 2022/23 The College - Spring Term (Jan - April)

Pre-requisite Modules:

**Co-requisite Modules:** 

Lecturer(s): Dr MK Pipelzadeh, Ms E Williams

**Format:** 22 x 2 hours lectures

**Delivery Method:** Delivery of this module will be through a series of lectures. All teaching is based on Bay campus.

### Module Aims:

To present to students the basic mathematical knowledge of fundamental topics of differentiation, integration, matrices and vectors that will bring them to proper understanding of equation solving and the use of calculus in engineering and science.

## Module Content: Week 1 Introduction to the module. The session will provide an outline of the major aims and objectives of the module and how these relate to the wider programme, with reference to the study at undergraduate degree level. In this week, the following differentiation techniques are covered: Differential of e(u) and ln(u) where (u) = f(x)Derivatives of various trigonometric functions. Extended Chain Rule. Attempting a wide range of quiz questions based on lecture material from week 1 Week 2 Differential of an implicit function Differentiating inverse trig functions Logarithmic differentiation Maclaurin's series Attempting a wide range of quiz questions based on lecture material from week 2. Week 3 Introduction of hyperbolic Functions The integration of (ax+b)n The Integration of Exponential Functions When the base is not e Integral of the function is Logarithmic Integrating products of functions by recognition technique. Attempting a wide range of quiz questions based on lecture material from week 3. Week 4 Integration by Parts Integrating Fraction (recognition method) Integration by Using Partial Fraction Attempting a wide range of quiz questions based on lecture material from week 4. Week 5 Revision of all topics covered to date Closed-book examination (formal assessment – 30% weighting) Week 6 The dependent variable y, linear and non-linear types of equations The general solution of the first order using the separation method Solving second order differential equations. Attempting a wide range of quiz questions based on lecture material from week 6. Week 7 Introduction to Matrices: definition, rows, columns, elements, and size Special matrices; square and identity Transpose of a matrix Addition and subtraction Multiplication by a constant Multiplication of matrices. Week 8 Determinants of a 2 x 2 matrix Minor and Cofactors of a 3x3 matrix Determinant of a 3x 3 matrix The Inverse of a matrix Alternative method of inversing a matrix Week 9 Solution of Equations by the Gaussian Elimination "technique

Row Echelon (RE) Form of an Augmented Matrix Eigenvalues and Eigenvectors of a 2 x 2 matrix. Week 10 Cartesian components system of vectors Position vector of coordinates of points in space **Direction Ratios and Direction cosines** Scalar product (dot product) of vectors Properties of scalar vectors Vector cross product Properties of a vector product Determinants to evaluate the cross product vector Week 11 Revision of all topics covered to date Week 12 Examination Week Intended Learning Outcomes: Students completing this module should have knowledge and understanding of: • Differentiation of various functions such as implicit functions, inverse trigonometry functions, logarithmic functions. • Maclaurin's series to find expressions of various functions using the differentiation techniques. • Numerical integration techniques involving, products and quotients, exponential, logarithmic and trig functions. • Introduction of hyperbolic functions which are based on the exponential functions. • General and particular solutions of homogeneous and inhomogeneous differential equations. • Numerical techniques for the manipulation of matrices, the law of matrices, the determinant of a matrix. Solutions of a system of equations via Gaussian elimination. Eigenvalues and associated eigenvectors for non trivial solutions of a system of equations. • Three dimensional Cartesian coordinates. The unit vectors. Direction cosines. The vector and scalar products rules and definitions. • Students will be able to solve variety of differential and integral equations which encompass the core of engineering mathematics. • Students will be able to apply matrices techniques in manipulating and solving simultaneous equations. • Students will be able to use the vector analysis techniques in solving vector problems. Assessment: In class test (Invigilated on campus) (30%) Examination 1 (70%) **Resit Assessment:** Examination (Resit instrument) (100%) Assessment Description: Assessment A- Assignment #1 covering topics from weeks 1-4 of teaching (30% weighting) Assessment B- Assignment #2 covering topics from weeks 4-7 of teaching (70% weighting) Moderation approach to main assessment: Second marking as sampling or moderation Assessment Feedback: Online quiz-test of multiple choices on various differentiation techniques. The score is highlighted in Canvas after the completion of the test. Students receive feedback by drop-in session following mid-term exam. The assessment works are checked by the students in the revision weeks against the given model answers. Examination: Generic feedback of End of Term exam via Canvas. Failure Redemption: Supplementary exam Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

This module is only available to students studying the relevant programmes within The College, Swansea University.

## MA-022 Fundamentals of Programming

## Credits: 15 Session: 2022/23 The College - Spring Term (Jan - April)

Pre-requisite Modules:

Co-requisite Modules:

Lecturer(s): Dr SJ Pratt, Mrs NSF Aldoumani

**Format:** 11 x 2 hours lectures

11 x 2 hours tutorial

**Delivery Method:** Delivery of this module will be through a series of lectures. All teaching is based on campus.

**Module Aims:** The module provides an introduction to programming concepts, terminology and the evolution of programming. Students will develop an understanding of what software development is and what software developers do. This module allows students to conceptualise their knowledge through writing, testing and debugging software.

## Module Content: Week 1

Lecture session 1.1: Introduction to the module

Lecture session 1.2: Basic Concepts and Definitions

- What is a Programme?
- "Game Over!"
- The Programming Process
- Programme Files and Programme Execution
- System Programmes vs. Application Programmes
- Input data Process Output Information
- History of programming languages
- Current Programming Languages
- Development Environments
- Week 2

Lecture session 2.1: Twenty (20) minute review of previous session Lecture session 2.2: Algorithms and Programmes

- Problem Solving
- Algorithms
- Abstraction to lowest level
- Sub-programmes
- Pseudo-code and Structured Programming
- Parameters
- Repetition
- Dry Running

Lecture session 2.3: Writing Simple Programmes (practical) Students will be asked to write a simple code to execute a drawing using predefined instructions Week 3

Lecture session 3.1: Twenty (20) minute review of previous session

Lecture session 3.2: Outputs and Calculations

- The structure of a Python Programme and development environment.
- Commenting
- Reusing Code
- Classes
- Output Statements
- Variables & Assignment
- Calculations
- Priority & Precedence
- Errors

Lecture session 3.3: Writing Simple Programmes (practical) Students will be asked to write a simple calculation programme Week 4

Lecture session 4.1: Twenty (20) minute multiple-choice test using questions based on material from previous 3 sessions (formal assessment A -5% weighting) Lecture session 4.2: Inputs and Strings

- Getting Input
- String Variables
- Object Types
- Integer Class
- Python IDLE
- Object References

Lecture session 4.3: Writing Simple Programmes (practical) Students will be asked to write a simple shop transaction programme Week 5 Lecture session 5.1: Twenty (20) minute review of previous session

Lecture session 5.2: Conditions. The 'if-else' Statement

- If-Else
- Boolean Values
- Relational Operators and Operator Precedence
- Relational Expressions
- Compound Statements
- Nested Statements
- Precedence and Associativity
- Logical Connectives

Lecture session 5.3: Writing Simple Programmes (practical) Students will be asked to write a simple decision making programme Week 6

Lecture session 6.1: Twenty (20) minute review of previous session Lecture session 6.2: Loops

- The While Loop
- Counter Controlled Loop
- Sentinel Controlled Loops
- Complex Loops
- Do While Loop
- For Loop
- Nesting Loops

Lecture session 6.3: Problem-solving assignment (formal assessment D - 25% weighting) Students will be invited to choose one of 4 problems and develop their own solution code Week 7

Lecture session 7.1: Twenty (20) minute multiple-choice test using questions based on material from previous 3 sessions (formal assessment B - 5% weighting)

Lecture session 7.2: Methods

- Designing a Programme
- Methods & Classes
- Calling Methods
- Writing Methods
- Parameters
- Infinite Loops

Lecture session 5.3: Writing Simple Programmes (practical) Students will be asked to write their own method to create a simple drawing Week 8

Lecture session 8.1: Twenty (20) minute review of previous session

- Lecture session 8.2: Arrays
- Declaring Arrays/Tuples
- Accessing Tuples
- Processing Tuples with Loops
- Length of Tuples.
- Tuple Reference Variables
- Tuple Reference Parameters

Lecture session 8.3: Creating and reading from an array (practical) Students will be asked to create an array containing the first 40 Fibonacci numbers followed by a method that displays contents as a table Week 9

Lecture session 9.1: Twenty (20) minute review of previous session

Lecture session 9.2: Files • Reading Data from Files • Sequential Access Files • Writing to Files • Reading from a File • Reading from Files of unknown length Lecture session 9.3: White and read from a file (practical) Students will be asked to write and read from a file of (say) examination marks Week 10 Lecture session 10.1: Twenty (20) minute multiple-choice test using questions based on material from previous 3 sessions (formal assessment C - 5% weighting) Lecture session 10.2: Classes & Objects • What is an Object? • Objects Attributes & Behaviours • Constructor methods • Information Hiding Lecture session 10.3: Time allocated for assignment (practical) Lecturer will be provided with the opportunity to take a brief look at student assignments prior to their submission in the following week Week 11 Lecture session 11.1: Submission of student solutions to problem set in 6:3 Lecture session 11.2 Revision Week 12 Examination Week Intended Learning Outcomes: Upon completion of this module students will be able to demonstrate their knowledge and understanding of the following: That computer programmes are designed to solve problems. The success of a programme depends on how well the problem is understood and then broken down into identifiable components. Strict discipline is needed for correct syntax and coding. A programmer must ensure his programme can be easily understood by other programmers with appropriate structure and annotation Awareness of the wider range of career opportunities in computing, and how appropriate programming would be for the student's skills. The importance of taking a regular objective view of a programme under development as to its efficiency, smooth flow and standard of presentation. Awareness of current key programming languages and their respective advantages Assignment 4 (25%) Assessment: Examination 1 (60%) Assignment 1 (5%) Assignment 2 (5%) Assignment 3 (5%) **Resit Assessment:** Examination (Resit instrument) (100%) Assessment Description: Assessment A – MCO test covering weeks 1-3 in week 4 Assessment B – MCQ test covering weeks 4-6 in week 7 Assessment C – MCQ test covering weeks 7-9 in week 10 Assessment D – Assessment based on testing problem abstraction and developing code to solve one of four example

problems set by the lecturer. Set week 5, submitted week 11

Final Examination - Two (2) hour (closed-book) examination - Week 12

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback: Weekly example sheets ¿ written personal feedback Examination: Generic feedback via Canvas plus drop-in session for students who would like individual feedback on their performance.

Failure Redemption: Supplementary exam

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

This module is only available to students studying the relevant programmes within The College, Swansea University.

## MN-0002 Business

Credits: 15 Session: 2022/23 January-June

Pre-requisite Modules:

**Co-requisite Modules:** 

Lecturer(s): Mr EP Darling, Ms D Ball, Mrs PM Williams

Format: Lectures, Seminars, Presentations and In-Class tests

Delivery Method: The module is delivered through a combination of lectures and seminars.

**Module Aims:** This module provides students with knowledge of the fundamental aspects of business and business management. It offers extensive considerations in terms of business planning, product marketing, managing people and the legal side of business. This module also focuses on change management, essential in an age of continual technological advances.

**Module Content:** Week 1 - Introduction to the module: The session will provide an outline of the major aims and objectives of the module and how these relate to the wider programme. Introduction to Business Planning - Prior to attempting a more detail look at how businesses are managed, students' thoughts are engaged in considering the purpose of the business plan and its development and in the process define what a 'business' is from first principles. Students will then be placed by the lecturer into small groups and asked to design a simple Business Plan themselves over the next couple of weeks ready for presentation to the class in Week 3 - from that point students will be introduced to many of the essential parts of managing a business

Students are placed in to small tutorial groups and are required to develop a Business Plan to present in Week 3.

Week 2 – Fifteen (15) minute quiz using questions based on lecture material from week 1. Developing a Business Plan -

Continuation of concepts and refinement from week 1 and the importance of the business idea, intellectual property and patents

Small group tutorial Work on Business Plan presentation

Week 3 - Recap of Weeks 1 and 2 prior to student small group presentations

Small group tutorial: Presentation of Business Plan to the class

Week 4 – Marketing a product. Students will be introduced as to how a product/service is marketed: Marketing Plan Outline: Executive Summary, The challenge, Situation Analysis – Company, Customer, Competitor, Collaborators, Climate, SWOT, Market Share, Marketing Research vs. Market Research (The Value of Information; The Marketing Research Process; Problem Definition; Research Design; Data Types and Sources; Questionnaire Design;

Measurement Scales; Validity and Reliability; Attitude Measurement), Sampling, Marketing Research Report and Market Segmentation.

In order to achieve this, students are placed in to small tutorial groups and are required to develop a Marketing Plan to present in week 6.

Small group tutorial session 4.2: Set Group Business Plan Assignment (weighting-30%)

Week 5 - Fifteen (15) minute quiz using questions based on lecture material from week 4. Marketing a product: Marketing Mix – the 7 P's of Marketing. Summary of Marketing Mix Decisions. The product life cycle and cash flow Product mix and the Boston Matrix.

Week 6 - Fifteen (15) minute recap of the topic thus far.

Small group tutorial session week 6: Work on Business Plan assignment

Week 7 - Managing people: School of Scientific Thought – Taylor, School of Human Relations – Mayo, School of Neo-Human Relations - Maslow and Hertzberg. Motivation theories – Hertzberg's two-factor motivation theories. Maslow's hierarchy of needs.

Small group tutorial session: Work on informal question and answer session

Work on Business Plan assignment

Week 8 - Fifteen (15) minute quiz using questions based on lecture material from week 7. Managing People: Why are businesses interested in staff motivation? Financial motivators –Recruitment – Internal; External. Job analysis - Job description/specification, induction, training. Management by objectives – SMART. Management styles

Small group tutorial session: Work on Business Plan assignment

Week 9 - Fifteen (15) minute recap of the topics for week 8.

Small group tutorial week 9: Presentation of Business Plan to class

Week 10 - Managing the operation of a business: Compliance and Risk - Occupational Health and Safety,

Responsibility - Corporate; Social; Environment, Ethics (Decision-making and ethics; the shareholder v the

stakeholder), Technological change – Products; Materials; Processes; Systems. Change Management. Corporate aims and goals. Stakeholders and their objectives – Internal; External

Small group tutorial session week 10: Revise concepts of managing the operation of a business.

Submission of Business Plan Assignment (30% weighting)

Week 11 - Fifteen (15) minute quiz using questions based on lecture material from week 10. Managing the operation of a business: Introduction to Business Law – overview of the context of contract and commercial law in the business world. Context of Accounting – overview of: Break-Even, Cash flow, Two main Final Accounts – Profit and Loss and Balance Sheet.

Guest speaker from the business world – summary with question and answer session

Week 12 – Revision

Week 13 – Examinations

**Intended Learning Outcomes:** Define what a business is and its functions – from securing external funding to measuring success within a business.

How to prepare a basic Business Plan for a product/service and present that information in a coherent form both orally and in document.

Ability to describe marketing in the 21st century along with the variances between marketing approaches and selling approaches.

Ability to identify and collate marketing information and the Marketing Mix from an external and internal perspective, in the context of our changing world.

Recognise various product strategies, the Product Life Cycle and product classifications.

Describe what effective management is and the important factors in the development of organisations.

Recount how learning is an important key to changing organisational behaviour.

Describe how nexus that exists between, planning, finance and accounting, marketing, HRM, legal systems and the internal and external economic drivers to any business to achieve the goals of that business.

Assessment:	Presentation (10%)
	Presentation (10%)
	Coursework 1 (30%)
	Coursework 1 (30%)
	Examination 1 (60%)
	Examination 1 (60%)
<b>Resit Assessment:</b>	Examination 1 (100%)
	Examination 1 (100%)

## Assessment Description:

Assessment 1

Small group presentation and document (Marketing Plan Report) GROUP (and individual contribution in report). 15 minutes per presentation in groups with 5 minutes Q and A. Presentation as a group on a Marketing Plan – students will be required to work effectively as a team and research and communicate ideas effectively. Group compilation of the topic area presented in a written report, with separate individual evaluations of contributions to the task. This assessment is designed to enhance understating of the topic of Marketing and its potential practical application.

Assessment 2

Final Examination

Two (2) hour (closed-book) examination Final summative examination on all topics covered in the module **Moderation approach to main assessment:** Second marking as sampling or moderation

Assessment Feedback: Individual written feedback as well verbal one on one feedback is given.

Failure Redemption: Students can re-sit the examination component at the next available assessment point

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

This module is compulsory on the 4 year integrated Programme in the School of Management

# MN-0006 Interactive Learning Skills and Communication

## Credits: 15 Session: 2022/23 September-January

Pre-requisite Modules:

## **Co-requisite Modules:**

Lecturer(s): Ms CL Edwards, Mr EP Darling, Ms K Owen

Format: Lectures and Seminars

Contact Hours will be delivered through a blend of live activities online and on-campus, and may include, for example, lectures, seminars, practical sessions and Academic Mentoring sessions.

**Delivery Method:** All Programmes will employ a blended approach to delivery using the Canvas Digital Learning Platform for live and self-directed online activity, with live and self-directed on-campus activities each week. Students may also have the opportunity to engage with online versions of sessions delivered on-campus

**Module Aims:** This module has been designed to help UK students to develop their academic literacy and communication skills in preparation for undergraduate study. The module will also provide students with an understanding of the institutional culture, practices, norms and expectations of higher education and to enable students to develop academic, research and communication skills using contemporary resources.

Module Content: Week 1 Introduction to the module/The College academic policies.

Academic integrity.

Techniques for avoiding plagiarism.

Week 2 APA referencing skills.

Week 3 APA Referencing (continued). Research skills and evaluation of sources. Allocation of topics for individual presentations.

Week 4 Annotated bibliographies. Introduction to the Career Development Course.

Week 5 In class test - Referencing and evaluation of research sources. The Career Development Course (continued).

Week 6 Presentation skills. The Career Development Course (continued).

Week 7 Reports (The research process). Benefits of groupwork. The Career Development Course (continued).

Week 8 Individual presentations (in class). The Career Development Course (continued).

Week 9 Reports (Structure). Completion of the Career Development Course.

Week 10 Reports (academic writing style and conventions). Summarising skills.

Week 11 Feedback on draft reports. Revision and examination techniques.

	g Outcomes: Apply principles of academic integrity to all aspects of study.		
Apply research and referencing techniques to avoid plagiarism.			
	Search for and evaluate sources of information using library and online sources (iFind, Google Scholar).		
•	r an oral presentation.		
Participate actively	y in a seminar discussion.		
Use non-verbal co	mmunication skills in a variety of situations.		
Demonstrate effec	tive oral and written communication skills.		
Apply the principl	es of formal academic writing style in a variety of formats.		
Produce a structure	ed research report.		
Produce an annota	ted bibliography in support of an assignment.		
	narise information presented both orally and in written formats.		
	revision and examination techniques.		
	bility skills through completion of the Career Development Course.		
Assessment:	Presentation (25%)		
	Report - Group (30%)		
	In class test (Invigilated on campus) (25%)		
	Coursework 1 (20%)		
Resit Assessment	: Coursework reassessment instrument (100%)		
	<b>ription:</b> Assessment A – Referencing and evaluation of research sources (Week 5, in class test, $1\frac{1}{2}$		
hours).	<b>Iption.</b> Assessment A – Referencing and evaluation of research sources (week 5, in class test, 1 72		
nouis).			
Assessment B In	dividual Presentation (Week 8, in class, 5 minutes).		
Assessment D – III	dividual i resentation (week 6, in class, 5 minutes).		
Assessment C G	roup research report (week 11, 1,500 words, Turnitin submission).		
Assessment C – O	Toup research report (week 11, 1,500 words, 1 urintin submission).		
Assessment D. C.	areas Development Course (week 4.0). In close, online, 1 hour ner week, 100/		
Assessment D – Career Development Course (week 4-9). In class, online, 1 hour per week -10%			
Reflection - written 500 words or video/audio/presentation – equivalent word count – 10%.			
	oach to main assessment: Second marking as sampling or moderation		
Assessment Feedback: Referencing and evaluation of sources ¿ written feedback.			
Individual presentation ¿ oral and written feedback.			
Group report ¿ feedback via Turnitin/Canvas.			
Career Development Course ¿ online/Canvas			
Failure Redemption: Students will resit the failed component of the module			
Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed			
activities online and on-campus.			
This module is con	npulsory on the Integrated 4 Year Degree for the School of Management		

# **MN-0501 Statistics**

### Credits: 15 Session: 2022/23 January-June

Pre-requisite Modules:

**Co-requisite Modules:** 

Lecturer(s): Ms E Williams, Mrs S Lewis, Ms K Owen

**Format:** Lectures and seminars

**Delivery Method:** The module is delivered through a combination of lectures and seminars.

**Module Aims:** This module provides an introduction to statistical concepts within the context of business, industry and government. Numerous data sources are employed including business, sport, medicine, physical science, engineering sciences, biological science and social science. This module provides an opportunity for meaningful interpretation of statistical information and results through a variety of statistical measures.

**Module Content:** Week 1 - The session will provide an outline of the major aims and objectives of the module and how these relate to the wider programme and study at undergraduate degree level, that is, the basic statistical principles: Visual presentation of data (Bar chart, Pie chart, Stem and Leaf, Histograms, Ogives, Scatter plots), Definitions of data, data types, sources of data.

The tools required: each student is required to have a non-programmable calculator with a bivariate statistical function. If you do not already own such a calculator it is recommended that you purchase a Casio fx-82MS (this was noted in your Pre-Departure Guide).

Week 2 – One hour revision of week 1 lecture sessions. Measures of Central Tendency as a means to describe data. Calculator operation (introduction)

Week 3 - Fifteen (15) minute revision based on lecture material from week 2. Examine and interpret measures of dispersion as a means of describing data

Week 4 – Fifteen (15) minute revision based on lecture material from week 3. Correlation. Calculator operation Week 5 - Fifteen (15) minute revision based on lecture material from week 4. Correlation (rankings)

Week 6 - Fifteen (15) minute revision based on lecture material from week 5. Excel for statistical analysis

Week 7 - Apply sampling techniques to data collection. Application to relevant areas of study

Week 8 - Fifteen (15) minute revision based on lecture material from week 7. Probability

Week 9 - Fifteen (15) minute revision based on lecture material from week 8. Probability (continued)

Week 10 - Fifteen (15) minute revision based on lecture material from week 9. Normal Distribution (Theory)

Week 11 - Fifteen (15) minute revision based on lecture material from week 10. Normal Distribution (Application) Week 12 – Revision

Week 13 - Examinations

**Intended Learning Outcomes:** Explain the foundations underlying and relevant to statistics and statistical principles. Examine measures of Central Tendency, and of dispersion, as a means of describing data.

Sampling techniques to data collection.

Determine probabilities in a variety of situations, and explain Normal Probability Distribution.

Collect bivariate data and interpret patterns and relationships with that data.

Determine and interpret measures of association. Draw and interpret tables.

Ability to analyse data and various modes of information using appropriate numerical tools and techniques.

5 5	
Ability to begin to a	evaluate and start to apply basic statistical methodologies to conceptual and real world situations.
Assessment:	In class test (Invigilated on campus) (30%)
	In class test (Invigilated on campus) (30%)
	Examination 1 (70%)
	Examination 1 (70%)
<b>Resit Assessment:</b>	Examination 1 (100%)
	Examination 1 (100%)
Assessment Description:	

### Assessment A

Mid-term Examination 2 hours All topics to Week 6 A2, A3, A7, A8, A9, A11, B1, B2, C1, C2, C4, D2

Assessment B

Final Examination 2 1/2 hours All topics with an emphasis on Weeks 7 to 11

A2 - A11, B1, B2, C1, C2, C4, D2

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback: Individual written feedback as well verbal one on one feedback is given.

Failure Redemption: Students have an opportunity to resit the examination in the next assessment period.

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

This module is compulsory on the 4 year integrated programme for the School of Management

## **MN-0502 Economics**

### Credits: 15 Session: 2022/23 January-June

Pre-requisite Modules:

**Co-requisite Modules:** 

Lecturer(s): Mr SD Dolbear

Format: Lectures, Seminars and in class tests

Delivery Method: The module is delivered through a combination of lectures and seminars

**Module Aims:** The module gives students an insight into some of the key elements of both micro and macroeconomics providing a solid foundation and sound understanding for the further study of the varied field of economics s. A focus is given to the demand and supply model, elasticities, the functions of money and the role the central bank, market structures, economic growth, inflation, equilibrium in the macro-economy and government policies..

**Module Content:** Week 1 - Introduction to microeconomics and macroeconomics and the associated nomenclature and terminologies. Introduction to the key thinkers in economics and their insights

Week 2 - Factors of production and the Production Possibility Frontier (PPF). The demand and supply model – Demand.

Set and discuss topic/s for coursework assignment – submission Week 8 (formal assessment A -15% weighting) Week 3 - The demand and supply model – Supply; Market equilibrium; Surplus and shortage e.g. Market equilibrium, changes and shifts in demand and supply, excess demand and excess supply – how a new equilibrium is reached & including graphical representations

Week 4 – Elasticity and applications e.g. price elasticity of demand, price elasticity of supply, income elasticity of demand, cross elasticity of demand

Week 5 - Firms and Production – Costs (Short-run & Long-run) e.g. fixed and Variable Costs, the Law of diminishing returns, marginal cost, marginal revenue, average cost of production (SRAC), marginal and average product of labour, long-run average costs (LRAC) - including graphical representations. Economies and Diseconomies of Scale – Internal; MES; External

Forty (40) minute written test (formal assessment B -5% weighting) using questions based on material from previous sessions.

Week 6 - Market structures 1 – The markets, characteristics and competition, perfect competition, monopoly markets. oligopolistic markets, monopolistically competitive markets. Macroeconomic overview - Defining macroeconomics; identifying, defining and describing the main macroeconomic objectives of government, conflicts between objectives, policy instruments and debates

Week 7 - The Macro-economy - equilibrium in the economy, the circular flow of income model, the adjustment to equilibrium, aggregate demand & aggregate supply

Week 8 - Equilibrium in the economy - the AD schedule and full employment, deflationary and inflationary gaps, fiscal policy, the role of fiscal policy: impact on AD (reflationary policy), the multiplier effect

Submission of coursework assignment set in session 2.2 (formal assessment A -15% weighting)

Week 9 - Money and its functions - the money market: Money demand (liquidity preference) and money supply and equilibrium. Monetary policy - history and overview, Bank of England, Monetary Policy Committee (MPC)

Week 10 - An introduction to inflation - Defining and measuring inflation; Consumer Price Index (CPI), GDP

deflator. Problems associated with inflation – uncertainty, re-distribution, international trade, etc.

Forty (40) minute written test (formal assessment B -5% weighting) using questions based on material from previous sessions.

Week 11 - National Income (GDP & GNP), economic growth and productivity, the economic cycle. Unemployment (an overview) - Measures and measurement globally and in the UK, types of unemployment – frictional, structural, cyclical/demand deficient, consequences of unemployment – the economic and social costs, impact of unemployment – rate and duration and reduction methods and policy

Week 12 – Revision

Week 13 – Examinations

## Intended Learning Outcomes:

Ability to appreciate the fundamental importance to the subject of the history and context of current scholarship.

Comprehension of the key defining aspects of microeconomics and macroeconomic theory. Use various models (graphical/diagrammatical) and numerical techniques to effectively describe economic situations.

The fundamental issues concerning the economic issues and processes that impact upon contemporary economies with an emphasis on the UK economy and associated market structures.

The fundamental range of economic theories and models and their application to economic issues. Central policy and objectives with regard to inflation and growth.

Assessment: Coursework 1 (25%) Examination 1 (75%)

**Resit Assessment:** Examination 1 (100%)

Assessment Description: Individual essay week 8 (25% weighting)

End of term closed book exam on all topics covered in the module (75% weighting).

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback: Individual written feedback as well verbal one to one feedback is given.

**Failure Redemption:** Students have an opportunity to resit the examination in the next assessment period, weighted 100%.

Additional Notes: Delivery of both teaching and assessment will be blended including live and self-directed activities online and on-campus.

this module is compulsory on the 4 year integrated programme for the School of Management

# SCI101 Analytical Techniques 1

## Credits: 15 Session: 2022/23 The College - Summer Term (May - Aug)

Pre-requisite Modules:

Co-requisite Modules:

Lecturer(s): Dr MG Jones

**Format:** 22 x 2-hour lectures

**Delivery Method:** Delivery of this module will be through a series of lectures followed by selective support classes. All teaching is based on campus.

**Module Aims:** This module is intended to provide students of engineering and science with knowledge of the fundamentals of the branch of pure mathematics known as analysis. The module reviews the aspects of classical pure mathematics and leads into the development of a rigorous foundation for the study of calculus, matrices and complex numbers.

Module Content: Week 1 -Introduction to the module: The session will provide an outline of the major aims and objectives of the module and how these relate to the wider programme with reference to the, and study at undergraduate degree level. The purpose of Analytical Techniques and reason for numeracy Basic theory of numbers, +ve and -ve, numbers, rational and irrational numbers ratios, prime numbers Proper, improper and mixed fractions, Percentages decimal fractions. Basic manipulation. Precedence of operations. Conventions and nomenclature. Indices & the rules of indices. Week 2 – Multiplication, addition, subtraction and division of linear algebraic expressions and fractions. Expansion of brackets, Difference of two squares, expansions of: Binomials and trinomials. Factorisation of quadratic expressions. Solution of quadratic equations : By factorisation By completing the square By (deriving) and using the quadratic formula. Properties of the roots of quadratic equations & use of the "discriminator" The Factor (Remainder) theorem. Factorisation of cubic and quartic polynomial expressions Partial Fractions. Determination of A & B in and the use of the cover-up rule Week 3 - Solution of linear simultaneous linear equations by elimination: 2 unknowns 3 unknowns Graphical representation Solution of simultaneous quadratic and linear equations for 2 variables Graphical representation Definitions and basic ratio functions and application to acute and obtuse angles. Standard values of sin, cos and tan Basic use of trigonometrical functions Basic trig identities, Solution of triangles using the Sine rule & Cosine rules Week 4 – Introduction to the Cartesian system and the plotting of graphs. Equation of a straight line, Slope of the line and the normal Circular geometry, area, circumference, radians, sectors. Tangents and cords to the circle Definition of logarithms, natural logs, (In)and common logarithms Laws of logarithms, Changing the base of logarithms Simplification of algebraic expressions involving, indices, and logarithmic expressions Solution of equations containing logarithms or x as a power Week 5 -Lecture session 5.1 Revision Workshop Session 5.2: One (1) hour closed-book test (formal assessment A - 20% weighting) Week 6 - Defining a Sequence Convergent, divergent and periodic sequences. Behaviour of , Definition of series. Arithmetic and geometric progressions Simple, and compound, interest Sum of an AP, Sum of GP using, Use of sigma notation of the form of the form, Simple multiplication and special cases. Calculation of factors. Pascal's triangle. Techniques of expansion. Use of the Binomial Theorem in the form: Week 7 - The concept of limits General approach to determining limits of algebraic functions Singularities Differential calculus

Algebraic approach: Differentiation from first principles, Differentiation of

The general gradient function of the curve and the tangent, Formulation of the general rule Differentiation of a product, y=uv.

Week 8 - The rules of systematic differentiation and standard differentials including:
Differentiation of a quotient .
Differentiating a function of a function, substitution of the variable, (chain rule), .
Differential of exponential and logarithmic functions and
Geometric representation.
Stationary values of curves,
Local maxima and minima. Location using
identification of local maxima and minima using the second differential
Application example.

Week 9 - Introduction to integration, the reverse of differentiation The general rule The constant of integration. Integration of a sum.

Methods of Integration Integration of, Functions whose integrals are logarithmic, Integration of exponential functions

Week 10 - Integration between limits

Area under a curve

Area under curves, the definite integral

Areas between boundaries, horizontal, quadrants, negative areas, symmetrical areas

Compound areas, horizontal elements.

Week 11 - Revision

## Week 12 – Examinations

## Intended Learning Outcomes: Knowledge and Understanding

Upon completion of this module students will be able to demonstrate their knowledge and understanding of the following:

- The basis of algebra including, indices, surds and use of brackets within statements and basic equations.
- Solutions of quadratic equations, factorization, and the laws of logarithms and surds.
- Solutions of simultaneous equations involving 2 and 3 variables.
- Trigonometrical ratios, equations of tangents, and the normal to a curve.
- Sequences, Arithmetic and Geometric progressions. Simple and compound interest formulae. Binomial expansions.
- Differentiation by first principles. Stationary conditions. Maximum and minimum points on a curve.
- Differentiation of special functions such as, logs, trig and exponential functions.
- Systematic techniques of differentiation including, function of a function, products and quotient rules.
- Integration techniques and its application to areas. The definite integral and boundary values. Integration of

logarithmic and exponential functions.

Assessment:	In class test (Invigilated on campus) (20%)
	In class test (Invigilated on campus) (20%)
	In class test (Invigilated on campus) (20%)
	Examination 1 (70%)
	Examination 1 (70%)
	Examination 1 (70%)
	Assignment 1 (10%)
	Assignment 1 (10%)
	Assignment 1 (10%)
<b>Resit Assessment:</b>	Examination (Resit instrument) (100%)
	Examination (Resit instrument) (100%)
	Examination (Resit instrument) (100%)

Assessment Description: Assessment 1 - Weekly Homework (10%) Mid-term assessment - Closed book test (20%)

End of semester examination (70%)

Moderation approach to main assessment: Second marking as sampling or moderation

Assessment Feedback: Coursework: Written feedback with returned scripts

Mid-term test: Individual pro-forma reports with recommendations

Examination: Generic feedback via Canvas plus drop-in session for students who would like individual feedback on their performance.

**Failure Redemption:** Candidates on standard delivery programmes (Foundation, Level 4, Pre-Masters) must accumulate 15 credits by the end of the second semester of their studies in order for their candidature of study to be continued. If a candidate does meet this requirement then they will be required to withdraw from their studies.

For standard delivery programmes (Foundation, Level 4, Pre-Masters, non-integrated programmes);

¿ At the discretion of The College Progression Board those candidates who fail a module in a given semester can be offered supplementary assessment(s) providing that the marks in the failed modules are no more than 15% below the pass mark.

 $\dot{c}$  Should the candidate fail the supplementary assessment(s) then, if eligible, they will be required to repeat the module in full (with attendance).

 $\dot{c}$  Candidates that do not qualify for supplementary assessment(s) will be required to repeat the entire module in full (with attendance).

 $\dot{c}$  Candidates can take a mixture of repeat modules, supplementary assessments and first sits of modules provided that the total module credits does exceed 95 credits, subject to any constraints in timetabling.

*¿* If a candidate fails a repeat module (with attendance) then they will be permitted a supplementary final opportunity when the marks for the failed module(s) are no more than 15% below the pass mark. If a candidate does meet this threshold they will be required to withdraw from their studies.

¿ Candidates must satisfy attendance and assessment requirements of all modules. Candidates whose attendance or progress is unsatisfactory would normally be reported to the University Progression and Awards Board.

Additional Notes: This module is only available to students studying the relevant programmes within The College, Swansea University.

## **TC-0001 The College Resilience module**

## Credits: 0 Session: 2022/23 The College - Autumn Term (Sep - Dec)

Pre-requisite Modules:

## **Co-requisite Modules:**

Lecturer(s): Ms CL Edwards, Ms TA Jones, Ms K Owen, Mrs KM Roberts

**Format:** 5 x 1 hour lectures

5 x 1 hour seminars

**Delivery Method:** Delivery of this module will be through a series of lectures and seminars. All teaching is based on campus

**Module Aims:** Resilience is having the ability to deal with difficult situations in your personal and professional life. This is a skill that can be learned and developed with thoughts, actions, knowledge and a commitment to achieving your goals. Having the right tools and a willingness to succeed can lead to a positive, healthy, well balanced and stress-free life. This module aims to help students understand the importance of resilience and how to become resilient. Students will learn about the key components of resilience to ensure they have the tools needed to maintain good physical and mental well-being when faced with challenging situations.

Module Content: Week 1: Wellbeing – accessing support and University Services

Lecture 1: Recognising personal needs and where to find help. Learning valuable tools needed to problem solve. Seminar 1: Accessing well-being support, reducing anxiety and stress, mindfulness and therapy.

Week 2: What are extenuating circumstances?

Lecture 2: Understanding resilience and taking ownership of self-improvement. The power of 'yet' and moving mindset from 'I cannot do it' to 'I cannot do it yet'

Seminar 2: Learning to learn.

Week 3: Time Management and Study Hacks

Lecture 3: Breaking down tasks and creating manageable workloads.

Seminar 3: Planning schedules and creating an assessment diary / workplan.

Week 4: The Importance of Self-directed Study

Lecture 4: How to get the most out of your time and where to find additional resources/student study support. Seminar 4: Exploring CAS, academic learning and developing learning skills for life.

Break – 2-week module break

Week 7: Exam Preparations and Revision techniques

Lecture 5: Spaced learning and dealing with assessment related anxiety.

Seminar 5: Developing an assessment revision schedule

Intended Learning Outcomes: By the end of this module, students should be able to:

1. Understand the importance of resilience and how to become resilient.

2. Use effective tools to build resilience and avoid negative thinking.

3. Develop strategies to organise your day-to-day life.

4. Recognise their personal needs and how to access help when you need it.

5. Manage their time effectively, creating manageable workloads and planning ahead.

6. Study independently, and know where and how to find study support.

Assessment:	Online Class Test (25%)
	Online Class Test (25%)
	Online Class Test (25%)

Online Class Test (25%)

Assessment Description: Each component is a weekly task that aims to develop a student's knowledge and personal development.

Coursework 1, 2, 3, & 4: CANVAS quiz - 25% weighting

Students will receive a grade for each CANVAS quiz, based on the grade classification for the Foundation programme (below) but the overall module is pass/fail:

Strong 1st Hons 86%+ 1st Class 70% – 85% 2:1 60% - 69% 2:2 50% - 59% 3rd Class 40% - 49% F Fail Less than 40%

Moderation approach to main assessment: Not applicable

Assessment Feedback: Written feedback plus drop-in sessions for students who would like individual feedback on their performance.

**Failure Redemption:** The module is non-credit bearing and pass/fail. If a student passes the module then this will appear on their Higher Education Achievement Record (HEAR) and their transcript. If a student fails the module this will appear on their transcript and they will not have the module added to their Higher Education Achievement Record. Failure of the module will not impact on students progressing to their next level of study.

Additional Notes: This module is only available to students studying the relevant programmes within The College, Swansea University.