

# Department of Accounting and Finance AG428 Asset Pricing 2024/25 Semester 2

20 Module Credits

## Module Details

#### **Class Description**

The class covers a range of issues relating to the empirical analysis of evaluating asset pricing models

#### **Teaching Hours**

Lectures: All weeks, Monday 10am-1pm.

#### Prerequisites

BF123/BF124 and all core Finance classes in years 2 and 3.

# **Contact Details**

Lecturer: Professor Jonathan Fletcher

Room number: Stenhouse 3.27

Telephone: 0141 548 4963

E-mail: j.fletcher@strath.ac.uk

Office Hours: Tuesday, 2-4pm

### **Module Learning**

**Class Aims** 

The aim of the class is to explore the testing of mean-variance efficiency, which is a central prediction of all asset pricing models. The class will also look at model comparison tests, the impact of market frictions, and conditioning information.

#### Learning Objectives and Outcomes

The following learning outcomes will contribute to your self-analysis and reflection in your Student's Personal Development Planning (SPDP). These learning outcomes will be assessed using the methods explained in the "Assessment" section in this Outline.

Subject-specific knowledge and skills

On completing this class you will be able to:

- A.1 Understand the time-series regression approach to evaluate linear factor models.
- A.2 Test linear factor models using Matlab and interpret the resulting empirical findings.
- A.3 Explain the factor spanning regression tests.
- A.4 Discuss the model comparison tests in the time-series regression approach.
- A.5 Evaluate the impact of market frictions on tests of portfolio efficiency.
- A.6 Examine the alternative approaches to test mean-variance efficiency in the presence of market frictions.
- A.7 Evaluate the benefits of using conditioning information in mean-variance portfolio strategies.

Cognitive abilities and non-subject specific skills

- B.1 Develop academic skills in reading and understanding academic research papers.
- B.2 Develop computational skills in undertaking empirical research through the use of Matlab in the areas covered by the class that are also applicable to other areas of Finance.

B.3 Develop analytical skills in interpreting empirical findings and recognising some of the limitations faced by empirical researchers.

B.4 Exercise independent judgement in assessing what are relevant research papers and in the evaluation of research findings.

### Module Structure

#### Timetable

The following topics will be considered:

Week 1: Introduction to linear factor models and time-series regression approach.

Week 2: Gibbons, Ross and Shanken(1989) test of mean-variance efficiency, introduction to Matlab, testing linear factor models.

Week 3: Testing linear factor models and pricing error metrics. Factor redundancy tests.

Week 4: Alternative tests of mean-variance efficiency.

Week 5: Model comparison tests, multiple testing, sample mean-variance portfolios.

Week 6: Testing mean-variance spanning.

Week 7: Testing portfolio efficiency in the presence of market frictions.

Week 8: Testing portfolio efficiency in the presence of market frictions. Testing portfolio efficiency in the presence of conditioning information.

Week 9: Testing portfolio efficiency in the presence of conditioning information.

Week 10: Review

### Assessment and Feedback Details

- 1. Group assignment worth 50%. Due: Thursday 20<sup>th</sup> of March 2025. Marks/Feedback will be released on or before Thursday 10<sup>th</sup> of April 2025.
- 2. Final exam worth 50%. Date: During semester 2 exam diet.

An overall weighted average mark of 40% is required to pass the module.

It is a requirement for course completion to submit all assessed coursework. Non-submission of any part will result in an overall mark of zero being awarded for the module.

The following forms of feedback will assist you in this module:



### **Artificial Intelligence**

You are not permitted to use Gen-AI tools for this module unless you are a student with an adjustment report on Pegasus where this is explicitly specified as a 'reasonable adjustment'. Any student suspected of using such tools will be subject to investigation outlined in the <u>Student Discipline Procedure - Academic Misconduct.pdf (strath.ac.uk)</u> process.

## **Reading List**

There is no textbook for this class. A course pack can be found on the AG428 Myplace page under the "Class Outline and Course Pack" tab. There will be readings from journal research articles which will be given in class.

#### **UG Module Manual (Honours)**

Please refer to the accounting and finance UG manual module for the following (<u>Honours</u> <u>Module Manual.docx</u>):

- Tutorial Attendance
- Useful Contacts
- Penalties for Late Submission
- Feedback
- Compensation Scheme
- Resit Policy no resits in honours year
- Universal Marking Guide
- Useful Links