# GENERAL INFORMATION

**Instructor:** Alex W.H. CHAN  
**Email:** awhchan@hku.hk  
**Office:** (852)-28578510  
**Phone:**  
**Consultation times:**  

**Tutor:**  
**Pre-requisites:**  
- FINA0301 / FINA2322 – Derivatives  
- or STAT3905 Introduction to financial derivatives  
- or STAT3910 Financial economics I  
- or MATH3906 Financial calculus  

and  

- FINA2802 / FINA2320 – Investments and Portfolio Analysis  
- or STAT3609 The statistics of investment risk  

**Co-requisites:**  
**Mutually exclusive:**  

**Course Website:**  
**Other important details:**

## COURSE DESCRIPTION

This course aims to provide students with the advanced knowledge about risk management techniques in the financial market, including (i) risk management for equity portfolios, (ii) risk management for fixed income securities portfolios, (iii) risk management for derivative securities portfolios, (iv) risk management for financial institutions, (v) Riskmetrics, (vi) credit risk management, and (vii) the recent development of risk management tools and techniques in financial markets.

On the theoretical side, this course covers various risk measurement techniques and theoretical hedging models for different types of risk exposure. The theoretical models provide foundation knowledge for any professional career about risk management. On the practical side, this course covers recent topics that are related to the risk management in both Hong Kong and the United States. Projects about risk management are specially designed to let students apply the theoretical knowledge into real life situations.
### COURSE OBJECTIVES

1. To understand the risk management for equity portfolios
2. To understand the risk management for fixed income securities portfolios
3. To understand the risk management for derivative securities portfolios
4. To understand the risk management for financial institutions
5. To understand the Riskmetrics
6. To understand the credit risk management
7. To understand the recent development of risk management tools and techniques in financial markets

### FACULTY GOALS

Goal 1: Acquisition and internalization of knowledge of the programme discipline

Goal 2: Application and integration of knowledge

Goal 3: Inculcating professionalism and leadership

Goal 4: Developing global outlook

Goal 5: Mastering communication skills

Goal 6: Cultivating leadership

### COURSE LEARNING OUTCOMES

<table>
<thead>
<tr>
<th>Course Learning Outcomes</th>
<th>Aligned Faculty Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLO1 Understand the fundamental knowledge for the most common and important risk management tools in financial market</td>
<td>Goal 1, Goal 2, Goal 3, Goal 6</td>
</tr>
<tr>
<td>CLO2 Understand the financial derivative trading strategies used to manage risk or make speculation</td>
<td>Goal 1, Goal 2, Goal 3, Goal 6</td>
</tr>
<tr>
<td>CLO3 Understand the recent development of risk management tools and techniques in financial markets</td>
<td>Goal 1, Goal 2, Goal 3, Goal 4, Goal 6</td>
</tr>
<tr>
<td>CLO4 Understand how to apply the theoretical knowledge to real life practical situations through project works</td>
<td>Goal 1, Goal 2, Goal 3, Goal 4, Goal 5, Goal 6</td>
</tr>
</tbody>
</table>
### COURSE TEACHING AND LEARNING ACTIVITIES

<table>
<thead>
<tr>
<th>Course Teaching and Learning Activities</th>
<th>Expected contact hour</th>
<th>Study Load (% of study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T&amp;L1. Lecture</td>
<td>36 hours</td>
<td>30%</td>
</tr>
<tr>
<td>T&amp;L2. Tutorial</td>
<td>12 hours</td>
<td>10%</td>
</tr>
<tr>
<td>T&amp;L3. Self study</td>
<td>72 hours</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100%</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment Methods</th>
<th>Brief Description (Optional)</th>
<th>Weight</th>
<th>Aligned Course Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. Projects</td>
<td></td>
<td>45%</td>
<td>CL01, CL02, CLO3, CLO4</td>
</tr>
<tr>
<td>A2. Tests/Exams</td>
<td></td>
<td>50%</td>
<td>CL01, CL02, CLO3</td>
</tr>
<tr>
<td>A3. Class/Discussion Participation</td>
<td></td>
<td>5%</td>
<td>CL01, CL02, CLO3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
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### STANDARDS FOR ASSESSMENT

#### Course Grade Descriptors

- **A+, A, A-** Students demonstrate very good to excellent performance in the defined assessment criteria.
- **B+, B, B-** Students demonstrate good to very good performance in the defined assessment criteria.
- **C+, C, C-** Students demonstrate fair to good performance in the defined assessment criteria.
- **D+, D** Students demonstrate fair performance in the defined assessment criteria.
- **F** Students fail to show understanding of core materials in this course.
Assessment Rubrics for Each Assessment

COURSE CONTENT AND TENTATIVE TEACHING SCHEDULE

REQUIRED/RECOMMENDED READINGS & ONLINE MATERIALS (e.g. journals, textbooks, website addresses etc.)

Textbook:  

Other recommended readings:

- Risk Management & Insurance, *Twelfth Edition*, James S. Trieschmann, Robert Hoyt, and David Sommer, South-Western, 2004
- Financial Risk Manager Handbook: FRM Part I / Part II.

MEANS/PROCESSES FOR STUDENT FEEDBACK ON COURSE

- conducting mid-term survey in additional to SETL around the end of the semester
- Online response via Moodle site
- Others: __Course Evaluation at the end of the course______________________ (please specify)

COURSE POLICY (e.g. plagiarism, academic honesty, attendance, etc.)

The University Regulations on academic dishonesty will be strictly enforced! Please check the University Statement on plagiarism on the web: [http://www.hku.hk/plagiarism/](http://www.hku.hk/plagiarism/)

ADDITIONAL COURSE INFORMATION (e.g. e-learning platforms & materials, penalty for late assignments, etc.)