

#### AY2022/2023: SEMESTER 1 (AUGUST 2022 – DECEMBER 2022)

#### ACADEMIC OVERVIEW

| Module Instructors | Email Address       | Initial | Office      |
|--------------------|---------------------|---------|-------------|
| A/P Tay Puay Hui   | biztayp@nus.edu.sg  | TPH     | Biz 2 03-22 |
| A/P lain Potter    | i.potter@nus.edu.sg | IP      |             |

| Workload                            | Projected no. of<br>hours per week |
|-------------------------------------|------------------------------------|
| Seminar (Lecture/Case Presentation) | 3                                  |
| Project, tutorial assignments, etc  | 4                                  |
| Preparatory work                    | 6                                  |

#### Modular Credits: 4

Pre-requisites: ACC3616/ACC3706 – Corporate Governance and Risk Management

Classes will consist of one three-hour session per week over 13 weeks, with a combination of lectures and case study presentations by students.

#### INTRODUCTION

As the old adage goes, people working in defence have to be right 100% of the time, while the attackers only have to be right once. Major fraud scandals in the corporate world, most notably the failure of Enron, the Carrillion collapse, the Madoff ponzi scheme and the Toshiba accounting scandal, suggest that there are often times when "the greed of the bad guys is stronger than the reach of the good guys"<sup>1</sup>. The evolution of technology and with it, digital transformation globally, has also extended the speed and reach of these bad actors, as much as it has facilitated a paradigm shift in the conduct of business.

Accordingly, the complex nature of modern fraud has fueled a growing impetus for the rise of antifraud specialists and leaders in understanding and implementing internal controls, as well as conducting forensic investigations. Over the past decade, the world of forensic accounting has become more specialized in skills and broader in scope, bridging the gap between perception and reality<sup>2</sup>. From antifraud measures and financial crime investigations, the forensic accounting profession has evolved into specialized services including but not limited to damage assessment, expert testimony, due diligence, valuation and appraisals,

<sup>&</sup>lt;sup>1</sup> By Tim Weiner, the author of *Enemies: A History of the FBI*, Random House (2012)

<sup>&</sup>lt;sup>2</sup> Yigal Rechtman, "The Past, Present & Future of Forensic Accounting", CPA Journal (March 2020)



insurance claims investigation and analysis as well as commercial and marital dispute resolution.

Thanks to burgeoning technology, the adaptive use of an advanced technology arsenal comprising electronic discovery, big data analytics and data visualization serves to augment the skill sets of the forensic accounting profession in delivering the necessary value in a faster and more cost-effective manner amid a rapidly changing business world.

As we project into the future – one thing is virtually certain - the increasing complexity and sophistication of a digitally connected world will continue to propel the growing importance of the forensic accounting profession in catching criminals, settling disputes and financial crime risk management.

#### OBJECTIVES

This elective module aims to arm you with the knowledge and fundamental expertise of a forensic accountant in applying your accounting skills to investigate financial crimes, advise on financial crime risk management, conduct damage assessments and business valuations in order to apply them in dispute resolution.

This module is broadly divided into two parts – Forensic Investigation and Quantum Engagements. Building on your knowledge in the pertinent modules set out below, the first part of the module will focus on providing you with deeper insights into the various types of financial crimes, educating you on effective investigative techniques for financial crime detection, and how you can harness modern technology to power your investigations. You will delve into the essentials of a robust fraud risk management programme that will equip you with a sound understanding of the governance framework and internal control processes necessary to combat financial crime. You will likewise be coached on the success recipe for a comprehensive forensic investigation engagement as you embark on a practical journey from engagement planning to execution and ultimately, stakeholder reporting and communication.

The second part of this module – Quantum Engagements - will emphasize on developing your core competencies as a forensic accountant in the context of legal disputes and claims resolution. You will be introduced to the fundamentals of damage assessment and its underlying principles, and guided on how you can apply your business valuation skills in the settlement of commercial and personal disputes. Last but not least, you will also learn to leverage your accounting skills in the investigation and analysis of insurance claims.



#### POSITION OF THE MODULE IN THE OVERALL SYLLABUS

This module builds on and complements your knowledge and understanding acquired through the corporate governance and risk management module, accounting and finance modules such as financial accounting, auditing and business valuation, and modules pertaining to the legal and regulatory framework involving business, corporate and securities laws and regulations.

#### LEARNING APPROACH

The specialised and practical nature of forensic accounting calls for a blended educational approach in this module – one that equips, guides and imparts whilst combining conceptual understanding with practical case study applications. Taught by instructors who are past and present practitioners, this module offers you the opportunity to acquire and apply your forensic accounting skills and knowledge to selected real-life case studies, articulate the applied methodologies in your project presentations and written reports, and derive lessons learned through experiential sharing by the instructors.

Premised on a tailored instructional theme, this module seeks to nurture your interests and develop your skills in forensic accounting in the course of your learning journey centred on teamwork and collaboration.

#### LEARNING OUTCOMES

At the end of this module, you should be able to:

- Distinguish the roles between fraud examiners and forensic accountants;
- Explain the role and ethical and professional obligations of forensic accountants in the context of investigations and disputes;
- Outline the context of financial crimes and analyse the various types of financial crimes, the perpetration and dissipation methods, and lessons learned through reallife case studies;
- Apply the Fraud Risk Management Programme in a real-life context and evaluate red flags signalling the existence of financial crimes;
- Develop a forensic investigation engagement plan;
- Apply the appropriate investigative methodology in the execution of a forensic investigation engagement;
- Demonstrate the effective use of digital forensics and data analytics in investigations
- Prepare a concise forensic investigation report;
- Explain how forensic accounting techniques are used to assist in a range of disputes scenarios; and



Apply common accounting and business valuation principles to quantify damages.

#### **MODULE ASSESSMENT**

This module is based on continual assessment as set out below:

| Assessment Components |                                   |      |
|-----------------------|-----------------------------------|------|
| (i)                   | Group Project Presentation^       | 25%  |
| (ii)                  | Group Project Report <sup>^</sup> | 25%  |
| (iii)                 | Seminar participation             | 20%  |
| (iii)                 | Final Test (2 hours)*             | 30%  |
| Total Assessment      |                                   | 100% |

<sup>^</sup>The requirements of and assigned topics for the Group Project Presentation and Group Project Report will be announced by the first week of the module.

\*Week 13 (the exact date, time and venue will be confirmed and announced during the course of the module)

#### KEY AREAS OF SYLLABUS

- Overview of financial crimes
- Fraud risk management
- Planning, executing and concluding forensic investigation engagements
- Fundamental damages concepts and business valuation principles and their application to common scenarios
- The role of forensic accountants in intellectual property, investor-state and insurancerelated disputes

#### **READING MATERIALS**

Additional readings may be assigned for each topic and they will be available in the library, on the web, or be uploaded onto the LumiNUS, where appropriate.



| WEEK | DETAILED SYLLABUS  | INSTRUCTOR |
|------|--|------------|
|      | (indicative and may be subject to change)  |            |
| 1    | INTRODUCTION TO FORENSIC ACCOUNTING  | ТРН        |
|      | <ul> <li>What is Forensic Accounting?</li> </ul>   | IP         |
|      | <ul> <li>Distinguishing Fraud Examination and Forensic<br/>Accounting</li> </ul>   |            |
|      | <ul> <li>Overview of the roles and responsibilities of fraud<br/>examiners</li> </ul>  |            |
|      | <ul> <li>Overview of the roles and responsibilities of forensic<br/>accountants</li> </ul>   |            |
|      | <ul> <li>Professional standards governing forensic<br/>accountants/fraud examiners</li> </ul>  |            |
|      | <ul> <li>Applicable legislation and regulatory requirements</li> </ul>   |            |
| 2    | OVERVIEW OF FINANCIAL CRIME  | ТРН        |
|      | <ul> <li>The prevalence of financial crime</li> </ul>  |            |
|      | <ul> <li>The fraud triangle and its three elements</li> </ul>  |            |
|      | <ul> <li>Different types and channels of financial crime         <ul> <li>Types of financial crime</li> <li>Fraud</li> <li>Bribery and corruption</li> <li>Money laundering and terrorism financing</li> </ul> </li> </ul> |            |
|      | <ul> <li>Types of fraud</li> <li>Accounting fraud</li> <li>Asset misappropriation</li> <li>Consumer fraud</li> <li>Data theft</li> <li>Tax fraud</li> </ul>  |            |
|      | <ul> <li>Channels of financial crime perpetration</li> <li>o In-person</li> <li>o Over the phone</li> </ul>  |            |



| WEEK | DETAILED SYLLABUS   | INSTRUCTOR |
|------|---|------------|
|      | (indicative and may be subject to change)                             |            |
|      |   |            |
|      | <ul> <li>Banking systems</li> </ul>                                   |            |
|      | <ul> <li>Digital channels</li> </ul>                                  |            |
|      | <ul> <li>Cross-channels</li> </ul>                                    |            |
|      | <ul> <li>Understanding the "Bad Actors"</li> </ul>                    |            |
|      | - "Dark Triad" personalities  |            |
|      | - Non-personality related factors                                     |            |
|      |   |            |
|      | <ul> <li>Combating financial crime</li> </ul>                         |            |
|      | - Legal landscape   |            |
|      | - Government organisations  |            |
|      | - Private sector organisations  |            |
|      | - Individuals   |            |
|      |   |            |
|      |   |            |
| 3    | FRAUD RISK MANAGEMENT   | ТРН        |
|      |   |            |
|      | <ul> <li>Fraud risk governance</li> </ul>                             |            |
|      | <ul> <li>Roles and responsibilities within an organisation</li> </ul> |            |
|      | - The Three Lines Model   |            |
|      | <ul> <li>Essentials of a robust Fraud Risk Management</li> </ul>      |            |
|      | Programme (FRMP)  |            |
|      | <ul> <li>Fraud risk assessment</li> </ul>                             |            |
|      | - Inherent risks  |            |
|      | <ul> <li>Identify fraud risk scenarios</li> </ul>                     |            |
|      | <ul> <li>Assessment: likelihood and impact</li> </ul>                 |            |
|      |   |            |
|      | <ul> <li>Fraud risk mitigation</li> </ul>                             |            |
|      | - Preventive controls   |            |
|      | - Detective controls  |            |
|      | <ul> <li>Leveraging technology</li> </ul>                             |            |
|      | <ul> <li>Identifying the red flags</li> </ul>                         |            |
|      | <ul> <li>Fraud risk analysis, reporting and escalation</li> </ul>     |            |
|      | <ul> <li>Continuous monitoring and FRMP reviews</li> </ul>            |            |
|      | <ul> <li>Incident management and response plan</li> </ul>             |            |
|      |   |            |



| WEEK | <b>DETAILED SYLLABUS</b><br>(indicative and may be subject to change) | INSTRUCTOR |
|------|---|------------|
|      |   |            |
| 4    | PLANNING A FORENSIC INVESTIGATION ENGAGEMENT                          | ТРН        |
|      | <ul> <li>Investigation methodology</li> </ul>                         |            |
|      | <ul> <li>Hallmarks of a robust allegation response plan</li> </ul>    |            |
|      | <ul> <li>Governance over forensic investigations</li> </ul>           |            |
|      | <ul> <li>Stakeholders identification and constitution</li> </ul>      |            |
|      | <ul> <li>Assembling an investigation team</li> </ul>                  |            |
|      | <ul> <li>Confidentiality and security considerations</li> </ul>       |            |
|      | <ul> <li>Goals and scope of the investigation</li> </ul>              |            |
|      | <ul> <li>The fraud theory approach</li> </ul>                         |            |
|      | <ul> <li>Adaptive process analysis</li> </ul>                         |            |
|      | <ul> <li>Designing an investigation programme</li> </ul>              |            |
| 5    | CONDUCTING THE FORENSIC INVESTIGATION                                 | ТРН        |
|      | <ul> <li>Evidence collection</li> </ul>                               |            |
|      | - Organisation sources of information                                 |            |
|      | <ul> <li>Non-organisation sources of information</li> </ul>           |            |
|      | - Discovery process   |            |
|      | The interview process: effective interview techniques                 |            |
|      | <ul> <li>Evidence preservation and documentation</li> </ul>           |            |
|      | <ul> <li>Evidence analysis</li> </ul>                                 |            |
|      | Group 1 Case study presentation                                       |            |



| WEEK | DETAILED SYLLABUS  | INSTRUCTOR |
|------|--|------------|
|      | (indicative and may be subject to change)  |            |
|      |  |            |
| 6    | <ul> <li>THE ROLE OF ADVANCED TECHNOLOGY IN FORENSIC<br/>INVESTIGATIONS AMID AN INCREASINGLY TECHNOLOGY<br/>DRIVEN WORLD</li> <li>Understanding digital forensics</li> <li>Transforming digital media into forensic evidence <ul> <li>Data collection</li> <li>Data examination</li> </ul> </li> </ul> | TPH        |
|      | - Analysis   |            |
|      | - Reporting  |            |
|      | <ul> <li>Leveraging the power of data analytics in forensic<br/>investigations</li> </ul>  |            |
|      | Group 2 Case study presentation  |            |
|      | Group 2 case study presentation  |            |
|      |  |            |
|      | RECESS WEEK  |            |
| 7    | FORENSIC INVESTIGATION: REPORTING AND  | ТРН        |
| ,    | COMMUNICATIONS   |            |
|      | <ul> <li>Effective stakeholders engagement</li> </ul>  |            |
|      | <ul> <li>The Time Machine: mapping crime perpetration vs<br/>controls evolution timelines</li> </ul>   |            |
|      | <ul> <li>Impact analysis</li> </ul>  |            |
|      | <ul> <li>Identifying appropriate corrective actions</li> </ul>   |            |
|      | <ul> <li>Process evaluaton and improvements</li> </ul>   |            |
|      | <ul> <li>Preparing the forensic investigation report</li> </ul>  |            |
|      | <ul> <li>Stakeholders reporting</li> </ul>   |            |
|      | <ul> <li>Developing a comprehensive monitoring framework for<br/>the implementation of remediation measures</li> </ul>   |            |
|      |  |            |



| WEEK | <b>DETAILED SYLLABUS</b><br>(indicative and may be subject to change)   | INSTRUCTOR |
|------|---|------------|
| 8    | <ul> <li>DAMAGES FUNDAMENTALS</li> <li>Role of damages experts <ul> <li>Expert reports</li> <li>Information gathering</li> </ul> </li> <li>Underlying legal principles determining quantum</li> <li>Quantifying losses using Discounted Cash Flow (DCF) models</li> <li>Awareness of other common expert witness roles for forensic accountants <ul> <li>Compliance with financial reporting standards</li> <li>Compliance with auditing standards</li> <li>Existence and nature of transactions</li> </ul> </li> </ul> | IP         |
| 9    | <ul> <li>BUSINESS VALUATION PRINCPLES</li> <li>Valuation Standards / Scope</li> <li>Valuation approach and methodology <ul> <li>Income approach</li> <li>Market approach</li> <li>Asset approach</li> <li>Asset approach</li> </ul> </li> <li>Application <ul> <li>Discounts and premiums</li> <li>Additional capital requirements and surplus assets</li> </ul> </li> </ul>  | IP         |
| 10   | <ul> <li>COMMON APPLICATIONS</li> <li>Contractual disputes</li> <li>Shareholder disputes</li> <li>Post-M&amp;A disputes</li> <li>Group 4 Case study presentation</li> </ul>   | IP         |



| WEEK | DETAILED SYLLABUS  | INSTRUCTOR |
|------|--|------------|
| WEEK |  | INSTRUCTOR |
|      | (indicative and may be subject to change)  |            |
| 11   | MATRIMONIAL, INVESTOR-STATE AND INTELLECTUAL   | IP         |
|      | PROPERTY DISPUTES  |            |
|      |  |            |
|      | <ul> <li>Matrimonial disputes</li> </ul>   |            |
|      |  |            |
|      | <ul> <li>Investor-state disputes</li> </ul>  |            |
|      |  |            |
|      | <ul> <li>Intellectual property</li> </ul>  |            |
|      | <ul> <li>Remedies available in response to patent</li> </ul>                           |            |
|      | infringement   |            |
|      | <ul> <li>Awareness of other types of intellectual property</li> </ul>                  |            |
|      | dispute  |            |
|      | Group E Case study procentation  |            |
|      | Group 5 Case study presentation  |            |
|      |  |            |
| 12   | FORENSIC ACCOUNTING AND INSURANCE  | IP         |
|      |  |            |
|      | <ul> <li>Personal injury and death</li> </ul>  |            |
|      |  |            |
|      | <ul> <li>Business interruption</li> </ul>  |            |
|      | <ul> <li>Awareness of other insurance-related engagements</li> </ul>                   |            |
|      | <ul> <li>Awareness of other insurance-related engagements</li> <li>Property</li> </ul> |            |
|      | - Representations and warranties   |            |
|      | - Directors and officers   |            |
|      |  |            |
|      | Group 6 Case study presentation  |            |
|      |  |            |
|      |  |            |
| 13   | FINAL TEST   | ТРН        |
|      |  | IP         |
|      |  |            |



#### **BIOGRAPHY OF INSTRUCTORS**

#### Mr Tay Puay Hui

Puay Hui had served in the financial services industry over the past two decades, particularly with Credit Suisse, Bank J. Safra Sarasin and EFG Bank in Asia, of which the last 11 years were as Regional Chief Operating Officer ("COO"), and the last two years as Deputy Regional Head of EFG Bank ("EFG"), a listed Swiss private banking group under the European Financial Group.

As the Deputy Regional Head and Regional COO, Puay Hui was responsible for overseeing all Legal & Compliance, Finance, Operations and IT matters in the Asia Pacific region. In addition, he assisted the Executive Chairman and Regional Head of Asia Pacific in ensuring adequate governance, supervision and control over the day-to-day activities of the EFG's activities in Asia Pacific so as to ensure that they were conducted in a safe and sound manner in accordance with EFG's business strategy to achieve its operational and financial objectives. During his tenure at EFG, Puay Hui also served as the Alternate Chief Executive ("ACE") responsible for the business operations of EFG Bank AG, Hong Kong Branch.

Prior to his appointment at EFG, Puay Hui served as the Chief Risk Officer of Bordier & Cie AG, Singapore Branch. At Bank J. Safra Sarasin, Asia ("Bank Sarasin Asia"), Puay Hui held various leadership roles including the Regional Head of Risk Management, Regional Chief Operating Officer and Deputy Chief Executive Officer of Bank J. Safra Sarasin Ltd, Singapore Branch. As a key member of the senior management team in Asia and Chairperson of its Corporate Services Committee, Asset Liability Committee and Strategy Implementation Committee, he contributed to Bank Sarasin's business growth in Asia, streamlined its operational and technology platform, and successfully led costs rationalization initiatives across Asia that achieved the desired cost efficiencies.

Having established a robust corporate governance structure in Bank Sarasin Asia, Puay Hui was instrumental in driving its successful bank licence upgrade from a merchant bank to an offshore bank branch in Singapore and steering the efficient transfer of business process in a seamless manner. A year later, he effectively managed and implemented the group change in controlling shareholder process in Asia after attaining the relevant regulatory approvals and implementing the necessary regulatory and capital safeguards.

Before joining Bank Sarasin Asia, Puay Hui worked at Credit Suisse, where he held a number of leadership positions including the Head of Compliance, South Asia and Head of Financial Accounting, Singapore Branch. Prior to this, he served as Audit Manager at PricewaterhouseCoopers leading audit engagements in banking, fund management and the non-financial services industry. Puay Hui is a non-practising member of The Institute of Singapore Chartered Accountants (ISCA).



#### **Mr lain Potter**

lain has over 15 years' experience as a forensic accountant, practicing in London before relocating to Singapore in 2014 where he initially led the litigation support practice for MDD and is now an Executive Vice President in the Forensic Accounting & Economics division of J.S. Held. During his time practicing in Europe and Asia, lain has been appointed as an expert in disputes before courts and tribunals in the UK, Singapore, Malaysia, Thailand, Australia, India, the BVI, Nepal and Korea and he is regularly cross examined by opposing counsel.

Most of lain's work is as a party-appointed expert in court litigation or arbitration proceedings, although he has also been engaged as a single joint expert, tribunal-appointed expert and mediator. He has also been appointed on a number of occasions by the President of the Institute of Chartered Accountants in England and Wales to issue binding determinations as to the value of private companies' shares and the preparation of completion accounts.

With experience in a wide range of industries and holding Chartered Accountant qualifications from England (ICAEW) and Singapore (ISCA), as well as a number of business valuation (NACVA CVA and IVAS CVA), fraud (CFE) and financial (FCSI, IFQ) qualifications, Iain is able to provide expert opinions on many of the issues that commonly arise in commercial disputes. Iain is also occasionally engaged in the prosecution and defence of criminal and civil fraud matters and, during a secondment to the UK's Serious Fraud Office, oversaw the completion of a financial analysis report.

Recent examples of Jain's evidence being accepted by courts and tribunals include:

- Independent Claim Verification: The Kingdom of the Netherlands v The Russian Federation 'The Arctic Sunrise Arbitration' PCA Case:2014-12 – UNCLOS Arbitration (Award available here)
- Business Valuation: Ashley Francis Day v Anthony Yeo Chin Huat and others [2020] SGHC 93 – Singapore High Court (Judgment available <u>here</u>)
- Financial Reporting, Fraud and Asset Tracing: JTrust Asia Pte Ltd v Group Lease Holdings and others [2020] SGCA 95 – Singapore Court of Appeal (Judgment available <u>here</u>)

lain is a founding committee member of the Singapore-based Asia Pacific Institute of Experts, a professional organisation established to support and promote experts from all disciplines. He is also currently pursuing a number of areas of research including a PhD through the University of Leicester's School of Law focusing on the extent to which awards of damages reflect risk and uncertainty.