MNGT5540
Modelling Businesses

Course Outline
Session 3, 2015

Part A: Course-Specific Information
Part B: Key Policies, Student Responsibilities and Support
# Table of Content

## PART A: COURSE-SPECIFIC INFORMATION

1. STAFF CONTACT DETAILS 1
2. COURSE DETAILS 1
   - 2.1 Teaching Times and Locations 1
   - 2.2 Units of Credit 1
   - 2.3 Summary of Course 1
   - 2.4 Course Aims and Relationship to Other Courses 1
   - 2.5 Student Learning Outcomes 2
3. LEARNING AND TEACHING ACTIVITIES 5
   - 3.1 Approach to Learning and Teaching in the Course 5
   - 3.2 Learning Activities and Teaching Strategies 5
4. ASSESSMENT 5
   - 4.1 Formal Requirements 5
   - 4.2 Assessment Details 5
   - 4.3 Assessment Format 5
   - 4.4 Late Submission 6
5. COURSE RESOURCES 6
   - 5.1 Course Resources 6
6. COURSE EVALUATION AND DEVELOPMENT 6

## PART B: KEY POLICIES, STUDENT RESPONSIBILITIES AND SUPPORT

1. PROGRAM LEARNING GOALS AND OUTCOMES 1
2. ACADEMIC HONESTY AND PLAGIARISM 2
3. STUDENT RESPONSIBILITIES AND CONDUCT 2
   - 3.1 Workload 3
   - 3.2 Attendance 3
   - 3.3 General Conduct and Behaviour 3
   - 3.4 Occupational Health and Safety 3
   - 3.5 Keeping Informed 3
4. SPECIAL CONSIDERATION AND SUPPLEMENTARY EXAMINATIONS 4
5. STUDENT RESOURCES AND SUPPORT 5
PART A: COURSE-SPECIFIC INFORMATION

1. STAFF CONTACT DETAILS

Lecturer-in-charge: Nathan McLean
Phone: +61 407 997 588
Email: nathan.mclean@claymatter.com.au
Consultation Times: By appointment.

Lecturer-in-charge: James Hall
Phone: +61 400 153 606
Email: james.hall@claymatter.com.au
Consultation Times: By appointment.

2. COURSE DETAILS

2.1 Teaching Times and Locations

This course will be run over an intensive period.

Updated information about class times and locations can be found on the AGSM website and by logging in to the Google Calendar.

2.2 Units of Credit

The course is worth 6 units of credit.

2.3 Summary of Course

This course will equip you with the practical skills to design and structure decision making models. Students will be presented with a design methodology and the associated modelling techniques necessary to build models that are clear to use, powerful in application and address specific needs.

The models may be financial models, decision making models, costing models or operational models. Regardless of their purpose, the course will also equip you to visualise results in well structured dashboards that adhere to the needs of C-suite professionals and organisational decision makers.

The techniques covered will focus on Microsoft Excel and would benefit anyone who wishes to better understand, build, analyse or maintain Excel based models.

2.4 Course Aims and Relationship to Other Courses

There are literally millions of spreadsheets being created around the world to make decisions, and despite the significance of these decisions, the spreadsheets upon which they are based are rife with errors. Whilst the prevalence of spreadsheet errors is well documented, trillions of dollars are still spun through stock markets on the basis of calculations performed in Microsoft Excel. Executives justify strategies, acquisitions...
or redundancies based on the results of their spreadsheets. Governments decide on austerity measures based on the cell-by-cell formulas of Harvard economists. Research shows that all of these spreadsheets have errors, and the resulting effects can be catastrophic.

This course aims to ensure that you are not the next person paraded and ridiculed on the front page of the Australian Financial Review or the Financial Times. Through the combined use of a methodology and practical case studies, we will give you an in-depth examination of the models that are used by professionals. The focus will be on how to apply notions of best practice design principles to construct financial models, decision making models, costing models, operational models and dashboards in Microsoft Excel.

At the end of this course, you will (as a minimum) be able to open any model and quickly decide on the quality of the modeller and the risks involved with depending on it. More technical students will be better equipped to build best practice models, appreciate the importance of designing and specifying models at the outset, and be confident with the techniques used to manage spreadsheet risk. Your models will be built better, with more confidence and with greatly reduced risk of error.

### 2.5 Student Learning Outcomes

The Course Learning Outcomes are what you should be able to do by the end of this course if you participate fully in learning activities and successfully complete the assessment item.

By the end of this course, you should be able to do the following:

1. Conduct effective model design sessions;
2. Apply best practice model design methodologies to real problems;
3. Model integrated financial accounts and cash flow waterfalls;
4. Create all standard Excel charts, as well as tailored charts including bullet charts;
5. Identify best (and worst) practice techniques in models built by others;
6. Understand the elements of a formal model integrity review;
7. Have an informed conversation about inherent Microsoft Excel limitations;
8. Quickly and effectively cleanse a dataset in Microsoft Excel;
9. Understand when and how to use the suite of Microsoft Excel functionality, including: filters, shortcuts, styles, custom formats, conditional formatting, freeze panes, macro recording, VBA editing, hiding worksheets, grouping, range names (static and dynamic), dynamic controls (drop-down lists, radio buttons, check boxes, interactive buttons), pivot tables, linked workbooks (including copy-paste macros), flags, array techniques, data tables, transposition and data validation;
10. Understand when and how to best use the suite of Microsoft Excel formulas, including:
   - INDEX, MATCH, CHOOSE
   - LOOKUP, VLOOKUP, HLOOKUP (in particular, when not to use)
   - COUNT, COUNTA, COUNTIF, COUNTIFS
- SUM, SUMIF, SUMIFS, SUMPRODUCT
- NPV, XNPV, IRR, XIRR
- IF, AND, OR, NOT
- RANK, MAX, MIN
- EOMONTH, EDATE, MONTHS, DAYS360
- AVERAGE, MODE
- ABS, MOD
- ROUND, ROUNDDOWN, ROUNDPUP
- TEXT, UPPER, LOWER, TRANSPOSE
- ISERROR, IFERROR, ISNA, ISBLANK

The Course Learning Outcomes are what you should be able to DO by the end of this course if you participate fully in learning activities and successfully complete the assessment items.

The Learning Outcomes in this course also help you to achieve some of the overall Program Learning Goals and Outcomes for all postgraduate coursework students in the ASB. Program Learning Goals are what we want you to BE or HAVE by the time you successfully complete your degree (e.g. ‘be an effective team player’). You demonstrate this by achieving specific Program Learning Outcomes - what you are able to DO by the end of your degree (e.g. ‘participate collaboratively and responsibly in teams’).

### MBA Program Learning Goals and Outcomes

**Learning Goal 1: Business Management Knowledge**
Students should be able to identify and apply current knowledge of disciplinary and interdisciplinary theory and professional practice to general management and business within diverse situations

**Learning Goal 2: Critical Thinking**
Students should understand and be able to identify, research and analyse complex issues and problems in business and develop appropriate solutions

**Learning Goal 3: Communication**
Students should be able to produce written documents and oral presentations that communicate effectively complex disciplinary ideas and information for the intended audience and purpose

**Learning Goal 4: Teamwork**
Students should be able to participate collaboratively and responsibly in teams and to reflect upon their own contribution to the team and on the necessary processes and knowledge within the team to achieve specified outcomes

**Learning Goal 5: Responsible Business**
Students should be able to appraise ethical, environmental and sustainability considerations in decision making and in practice in business

Students should be able to consider the social and cultural implications of management practices and of business activities

**Learning Goal 6: Leadership**
Students should be able to reflect upon their own personal leadership style and the leadership needs of business and of teams

**Learning Goal 7: International Perspective**
Students should understand the needs of undertaking business within a global context

Students should be able to apply business management knowledge to business situations within global markets with due recognition for differences in cultural, legal, commercial and other issues

**Learning Goal 8: Risk Management**
Students should be able to demonstrate an understanding of the limits in precision and the risks associated with business models

Students should be able to appraise risk and to develop risk mitigation strategies applicable to business undertaken within uncertain and volatile environments
For more information on the Postgraduate Coursework Program Learning Goals and Outcomes, see Part B of the course outline.

The following table shows how your Course Learning Outcomes relate to the overall Program Learning Goals and Outcomes, and indicates where these are assessed (they may also be developed in tutorials and other activities):

<table>
<thead>
<tr>
<th>Program Learning Goals and Outcomes</th>
<th>Course Learning Outcomes</th>
<th>Course Assessment Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>This course helps you to achieve the following learning goals for all ASB postgraduate coursework students:</td>
<td>On successful completion of the course, you should be able to:</td>
<td>This learning outcome will be assessed in the following items:</td>
</tr>
</tbody>
</table>
| 1 Business Management Knowledge | • Model integrated financial accounts and cash flow waterfalls  
• Create all standard Excel charts, as well as bullet charts  
• Identify best (and worst) practice techniques in models built by others  
• Understand the elements of a formal model integrity review  
• Quickly and effectively cleanse a dataset in Microsoft Excel  
• Understand when and how to use the suite of Microsoft Excel functionality  
• Understand when and how to best use the suite of Microsoft Excel formulas | Course discussions and end of course assignment. |
| 2 Critical Thinking | • Apply best practice model design methodologies to real problems  
• Conduct effective model design sessions with clients | Specific white board exercise (group) and BYO problem solving session |
| 3 Communication | • This course will teach you visual communication techniques  
• Conduct effective model design sessions with clients | Course discussions and end of course assignment. |
| 4 Teamwork | Not specifically addressed in this course | General decorum in class. |
| 5 Responsible Business | Not specifically addressed in this course | General decorum in class. |
| 6 Leadership | Not specifically addressed in this course | General decorum in class. |
| 7 International Perspective | Not specifically addressed in this course | |
3. LEARNING AND TEACHING ACTIVITIES

3.1 Approach to Learning and Teaching in the Course

The approach taken to this course is to distil around 20 years of practical knowledge and experience in order to help facilitate students in three core skills:

- ‘I do’ – The learning of how to build robust Excel models with advanced dashboards and visualisation techniques.
- ‘I manage’ – Provide a proven problem solving methodology for participants to clearly articulate the problem to all stakeholders.
- ‘I understand’ – Insights are gained into what makes good and bad models including complexity and error checking.

3.2 Learning Activities and Teaching Strategies

Students will work through and build a real model sanitised for a classroom setting. The practical work will be backed up with the theoretical knowledge bank to understand the all important ‘why’ questions.

The course is designed to push practical instruction led exercises out of the classroom setting in order to focus discussions on theory and explanations of any difficult modelling concepts or formulas.

The course has pre-course materials to help students make the most of what is on offer, even if their own modelling experience is limited. Students who are doing entrepreneurial activities or have some experience in Excel or programming will likely get the maximum benefit from all three of the core skills being taught.

4. ASSESSMENT

4.1 Formal Requirements

In order to pass this course, you must:

- Achieve a composite mark of at least 50; and
- Make a satisfactory attempt at all assessment tasks. (see below).

4.2 Assessment Details

The assessment task will involve a short exam to be administered on the last day of the course. The assessment task will assess all of the Course Learning Outcomes outlined above, and will be graded on a satisfactory or unsatisfactory basis. More details about the nature of the assessment task will be provided during the intensive session.

4.3 Assessment Format

For guidelines on formatting and presenting your assignment, see http://www.asb.unsw.edu.au/currentstudents/agsmmba/academicinformation/assessmentsandexaminations/Pages/default.aspx
4.4 Late Submission

AGSM MBA Programs applies a daily penalty of 5% to late assignments. This policy was reviewed in October 2009 in light of the fact that certain schools within the Australian School of Business apply a 10% penalty. The decision of AGSM MBA Programs following this review was that current 5% penalty is appropriate to all of our programs and will remain unchanged.

Refer to policy at:  
http://www.asb.unsw.edu.au/currentstudents/agsmmba/academicinformation/assessmentsandexaminations/Pages/default.aspx

Quality Assurance
The ASB is actively monitoring student learning and quality of the student experience in all its programs. A random selection of completed assessment tasks may be used for quality assurance, such as to determine the extent to which program learning goals are being achieved. The information is required for accreditation purposes, and aggregated findings will be used to inform changes aimed at improving the quality of ASB programs. All material used for such processes will be treated as confidential.

5. COURSE RESOURCES

5.1 Course Resources

The website for this course is on UNSW Moodle at:  
https://moodle.telt.unsw.edu.au

There are no prescribed textbooks for this course. All necessary learning resources will be provided via UNSW Moodle or directly at the intensive session.

6. COURSE EVALUATION AND DEVELOPMENT

Mid- and end-of-Session feedback is sought from students about the courses offered in the AGSM MBA Program, and continual improvements are made based on this feedback. The mid-Session feedback is collected in weeks 3 or 4, and communicated to students in the class following its collection. Significant changes to courses and programs within the Program based on end-of-Session feedback are communicated to subsequent cohorts of students.
PART B: KEY POLICIES, STUDENT RESPONSIBILITIES AND SUPPORT

1. PROGRAM LEARNING GOALS AND OUTCOMES

The Australian School of Business Program Learning Goals reflect what we want all students to BE or HAVE by the time they successfully complete their degree, regardless of their individual majors or specialisations. For example, we want all our graduates to HAVE a high level of business knowledge, and a sound awareness of ethical, social, cultural and environmental implications of business. As well, we want all our graduates to BE effective problem-solvers, communicators and team participants. These are our overall learning goals for you.

You can demonstrate your achievement of these goals by the specific outcomes you achieve by the end of your degree (e.g. be able to analyse and research business problems and propose well-justified solutions). Each course contributes to your development of two or more program learning goals/outcomes by providing opportunities for you to practise these skills and to be assessed and receive feedback.

Program Learning Goals for undergraduate and postgraduate students cover the same key areas (application of business knowledge, critical thinking, communication and teamwork, ethical, social and environmental responsibility), which are key goals for all ASB students and essential for success in a globalised world. However, the specific outcomes reflect different expectations for these levels of study.

We strongly advise you to choose a range of courses which assist your development of these skills, e.g., courses assessing written and oral communication skills, and to keep a record of your achievements against the Program Learning Goals as part of your portfolio.

<table>
<thead>
<tr>
<th>MBA Program Learning Goals and Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning Goal 1: Business Management Knowledge</strong></td>
</tr>
<tr>
<td>Students should be able to identify and apply current knowledge of disciplinary and interdisciplinary theory and professional practice to general management and business within diverse situations</td>
</tr>
</tbody>
</table>

| **Learning Goal 2: Critical Thinking** |
| Students should understand and be able to identify, research and analyse complex issues and problems in business and develop appropriate solutions |

| **Learning Goal 3: Communication** |
| Students should be able to produce written documents and oral presentations that communicate effectively complex disciplinary ideas and information for the intended audience and purpose |

| **Learning Goal 4: Teamwork** |
| Students should be able to participate collaboratively and responsibly in teams and to reflect upon their own contribution to the team and on the necessary processes and knowledge within the team to achieve specified outcomes |
Learning Goal 5: Responsible Business
Students should be able to appraise ethical, environmental and sustainability considerations in decision making and in practice in business
Students should be able to consider the social and cultural implications of management practices and of business activities

Learning Goal 6: Leadership
Students should be able to reflect upon their own personal leadership style and the leadership needs of business and of teams

Learning Goal 7: International Perspective
Students should understand the needs of undertaking business within a global context
Students should be able to apply business management knowledge to business situations within global markets with due recognition for differences in cultural, legal, commercial and other issues

Learning Goal 8: Risk Management
Students should be able to demonstrate an understanding of the limits in precision and the risks associated with business models
Students should be able to appraise risk and to develop risk mitigation strategies applicable to business undertaken within uncertain and volatile environments

2. ACADEMIC HONESTY AND PLAGIARISM

The University regards plagiarism as a form of academic misconduct, and has very strict rules regarding plagiarism. For UNSW policies, penalties, and information to help you avoid plagiarism see: http://www.lc.unsw.edu.au/plagiarism/index.html as well as the guidelines in the online ELISE and ELISE Plus tutorials for all new UNSW students: http://info.library.unsw.edu.au/skills/tutorials/InfoSkills/index.htm.

To see if you understand plagiarism, do this short quiz: http://www.lc.unsw.edu.au/plagiarism/plagquiz.html

For information on how to acknowledge your sources and reference correctly, see: http://www.lc.unsw.edu.au/onlib/ref.html

For the ASB Harvard Referencing Guide, see the ASB Referencing and Plagiarism webpage (ASB >Learning and Teaching>Student services> Referencing and plagiarism)

3. STUDENT RESPONSIBILITIES AND CONDUCT

Students are expected to be familiar with and adhere to university policies in relation to class attendance and general conduct and behaviour, including maintaining a safe, respectful environment; and to understand their obligations in relation to workload, assessment and keeping informed.

AGSM MBA Programs and UNSW policies

In general, UNSW policies apply to staff and students of AGSM MBA Programs. Where there are additional points or procedures which apply specifically to AGSM MBA Programs they are set out on the AGSM website: http://www.asb.unsw.edu.au/currentstudents/agsmmba/studentresources/studentsrightsandresponsibilities/Pages/default.aspx
If students are in doubt about the policy or procedure relating to a particular matter they should seek advice from the Student Experience.


3.1 Workload

It is expected that you will spend at least ten hours per week studying this course. This time should be made up of reading, research, working on exercises and problems, and attending classes. In periods where you need to complete assignments or prepare for examinations, the workload may be greater.

Over-commitment has been a cause of failure for many students. You should take the required workload into account when planning how to balance study with employment and other activities.

3.2 Attendance

Your regular and punctual attendance at lectures and seminars is expected in this course. University regulations indicate that if students attend less than 80% of scheduled classes they may be refused final assessment.

http://www.asb.unsw.edu.au/currentstudents/agssmmba/academicinformation/enrolmentinformation/Pages/default.aspx#class attendance

3.3 General Conduct and Behaviour

You are expected to conduct yourself with consideration and respect for the needs of your fellow students and teaching staff. Conduct which unduly disrupts or interferes with a class, such as ringing or talking on mobile phones, is not acceptable and students may be asked to leave the class. More information on student conduct is available at: https://my.unsw.edu.au/student/atoz/BehaviourOfStudents.html

3.4 Occupational Health and Safety

UNSW Policy requires each person to work safely and responsibly, in order to avoid personal injury and to protect the safety of others. For more information, see http://www.ohs.unsw.edu.au.

3.5 Keeping Informed

You should take note of all announcements made in lectures, tutorials or on the course web site. From time to time, the University will send important announcements to your university e-mail address without providing you with a paper copy. You will be deemed to have received this information. It is also your responsibility to keep the University informed of all changes to your contact details.
4. SPECIAL CONSIDERATION AND SUPPLEMENTARY EXAMINATIONS

You must submit all assignments and attend all examinations scheduled for your course. You should seek assistance early if you suffer illness or misadventure which affects your course progress. For both general and specific information on ‘special considerations’ contact Student Experience and the lecturer-in-charge: Also see http://www.asb.unsw.edu.au/currentstudents/agsmmba/academicinformation/assessmentsandexaminations/Pages/default.aspx#exams


General Information on Special Consideration:

1. All applications for special consideration must be lodged online through myUNSW within 3 working days of the assessment due date (Log into myUNSW and go to My Student Profile tab > My Student Services channel > Online Services > Special Consideration). You will then need to submit the originals or certified copies of your completed Professional Authority form (pdf - download here) and other supporting documentation to Student Central. For more information, please study carefully the instructions and conditions at: https://my.unsw.edu.au/student/atoz/SpecialConsideration.html.

2. Please note that documentation may be checked for authenticity and the submission of false documentation will be treated as academic misconduct.

3. Applications will not be accepted by teaching staff. Student Experience will be automatically notified when you lodge an online application for special consideration.

4. Decisions and recommendations are only made by Student Experience, not by tutors.

5. Applying for special consideration does not automatically mean that you will be granted a supplementary exam or other concession.

Special Consideration and the Final Exam:

Applications for special consideration in relation to the final exam are considered by an AGSM Student Experience panel to which lecturers-in-charge provide their recommendations for each request.

If you attend the regular final exam, you are extremely unlikely to be granted a supplementary exam. Hence if you are too ill to perform up to your normal standard in the regular final exam, you are strongly advised not to attend. However, granting of a supplementary exam in such cases is not automatic. You would still need to satisfy the criteria stated above.
5. STUDENT RESOURCES AND SUPPORT

The University and the ASB provide a wide range of support services for students:

- **AGSM Student Experience**
  Advice and direction on all aspects of enrolment, timetables and graduation.
  Ground Floor – Blue Counter, AGSM Building (G27),
  Ph: 9931 9400
  E: studentexperience@agsm.edu.au

- **eLearning Support**: For online help using Moodle, follow the links from
  http://teaching.unsw.edu.au/moodle-students

  **For login issues**
  Contact the **UNSW IT Service Centre**:
  Hours: Monday–Friday 8am – 8pm
          Saturday–Sunday 11am – 2pm
  Email: ITServiceCentre@unsw.edu.au
  Phone: (02) 9385 1333; International: +61 2 9385 1333

  **For assistance in using Moodle, including how to upload assessments**
  Contact the **AGSM Elearning Coordinator**:
  Hours: Monday – Friday, 9am – 5pm
  Email: elearning@agsm.edu.au
  Phone: (02) 9931 9541; International: +61 2 9931 9541

  **For help with technical issues and problems**
  Contact the **External TELT Service Centre**:
  Hours: Monday–Friday 7.30am – 9.30pm
          Saturday–Sunday 8.30am – 4.30pm
  Email: externalteltsupport@unsw.edu.au
  Phone: (02) 9385 3331; International: +61 2 9385 3331

- **ASB Education Development Unit (EDU)**
  http://www.asb.unsw.edu.au/learningandteaching
  Academic writing, study skills and maths support specifically for ASB students.
  Services include workshops, online and printed resources, and individual
  consultations. EDU Office: Room GO7, Ground Floor, ASB Building (opposite
  Student Centre); Ph: +61 2 9385 5584; Email: edu@unsw.edu.au

- **UNSW Learning Centre** www.lc.unsw.edu.au
  Academic skills support services, including workshops and resources, for all
  UNSW students. See website for details.

- **Library training and search support services**:
  http://info.library.unsw.edu.au/web/services/services.html
- **IT Service Centre**: Technical support for problems logging in to websites, downloading documents etc. [https://www.it.unsw.edu.au/students/index.html](https://www.it.unsw.edu.au/students/index.html)
  UNSW Library Annexe (Ground floor)

- **UNSW Counselling and Psychological Services**
  [http://www.counselling.unsw.edu.au](http://www.counselling.unsw.edu.au)
  Free, confidential service for problems of a personal or academic nature; and workshops on study issues such as ‘Coping With Stress’ and ‘Procrastination’.
  Office: Level 2, Quadrangle East Wing; Ph: +61 2 9385 5418

- **Student Equity & Disabilities Unit** [http://www.studentequity.unsw.edu.au](http://www.studentequity.unsw.edu.au) Advice regarding equity and diversity issues, and support for students who have a disability or disadvantage that interferes with their learning.
  Office: Ground Floor, John Goodsell Building; Ph: +61 2 9385 4734