The Chair welcomed members to the meeting of the Boards of Studies for the Bachelor of Science.

DECLARATIONS OF POTENTIAL FOR CONFLICT OR PERCEIVED CONFLICTS OF INTEREST

No conflict of interest was declared.

1. MINUTES – Ref F50128

RESOLVED – 11/13

that the minutes of the Board of Studies for the Bachelor of Science meeting held on 20th May 2013 be confirmed.

2. ITEMS FOR COMMUNICATION DEALT EN BLOC

Members noted the following items as outlined in Part 1 of the Agenda:
(i) Title change to the unit MICR3340 from ‘Immunology in Health and Disease’ to ‘Immunity and Infection’ – Ref: F31962
(ii) Title change to the unit PHYS3012 from ‘Optics and Special Topics’ to ‘Frontiers in Modern Physics’ – Ref: F32299

3. MATH0700 PREPARATORY MATHEMATICS: AMENDMENT TO OFFERING STATUS – Ref F42201

The Board noted that MATH0700 Preparatory Mathematics was a non-award unit that had been approved both as an elective and as a ‘Category B’ broadening unit for the Bachelor of Arts, Bachelor of Commerce and Bachelor of Design students. Success in MATH0700 did not confer credit in an award course since it was approved as a bridging unit and it merely enabled students to satisfy the prerequisite for enrolment in any unit that specified a pass in MATHS 2C/2D or equivalent. As such the Board agreed that the unit could not be offered as an elective or as a ‘Category B’ broadening unit.
Notwithstanding this agreement, the Board engaged in a broader discussion relating to MATH0700 Preparatory Mathematics. A member raised the possibility of changing the level of this unit from a Level 0 to a Level 1 unit. The Board noted that there might be some benefits to this, however further consultation was required. By way of background the Board noted that this unit was currently undertaken by Mature-age Access Program (MAP) students and changing the level of the unit might have an impact on funding although overall students should not be financially worse off. The Board noted that the entry requirements for the Bachelor of Science did not have a mathematics prerequisite. In addition, Admissions had confirmed that although the course had no mathematics prerequisites, no students, who did not have the relevant mathematics background, had been admitted. This was however theoretically possible. The Board agreed that this issue warranted further discussion in the future.

Noting the above the Board,

RESOLVED – 12/13

to recommend to the Board of Coursework Studies that MATH0700 Preparatory Mathematics be not offered as an elective or as a ‘Category B’ broadening unit.

4. FACULTY OF MEDICINE DENTISTRY AND HEALTH SCIENCES: MICROBIOLOGY AND IMMUNOLOGY MAJOR – Ref F29693, F31971, F32142, F32024, F32041

Members noted that BIOL1130 Frontiers in Biology had been approved as a Level 1 core unit within the Microbiology and Immunology major and that the Faculty of Medicine, Dentistry and Health Sciences had proposed the following changes to the sequence of units within the Microbiology and Immunology major (without altering its approved structure of 2+2+4):

- that there be only one core (SCIE1106 Molecular Biology of the Cell) at Level 1;
- that BIOL1130 Frontiers in Biology be listed as Level 1 option;
- that ANHB1101 Human Biology I: Becoming Human and ANHB1102 Human Biology II: Being Human be introduced as additional Level 1 options within the Microbiology and Immunology major.

Members had before them the following:

- Approved sequence for Microbiology and Immunology major
- Proposed new sequence for Microbiology and Immunology major

RESOLVED – 13/13

to recommend to the Board of Coursework Studies that the changes to the sequence of units within the Microbiology and Immunology major, as set out in the agenda attachment, be approved effective from 2014.

5. FACULTY OF MEDICINE DENTISTRY AND HEALTH SCIENCES: PROPOSED AVAILABILITY OF SELECTED HONOURS SPECIALISATIONS

The Board considered the following change requests from the Faculty of Medicine Dentistry and Health Sciences:

5.1. Faculty of Medicine, Dentistry and Health Sciences: Honours in Aboriginal Health and Well Being – Ref F31450, F40632, F40634, F40633, F40635

The Faculty proposed that the honours specialisation in Aboriginal Health and Well Being be made not available in 2014. As a consequential change the following units were also to be made not available in 2014: AHEA4440 Aboriginal Health Honours Thesis Part 1, AHEA4441 Aboriginal Health Honours Thesis Part 2, AHEA4442 Aboriginal Health Honours Thesis Part 3 and AHEA4443 Aboriginal Health Honours Thesis Part 4.
RESOLVED – 14/13

that the honours specialisation Aboriginal Health and Well Being and the units listed above be made not available in 2014.

5.2. Faculty of Medicine, Dentistry and Health Sciences: Honours in Population Health – Ref F31393, F34508, F34509

The Faculty proposed that the honours specialisation in Population Health be made not available in 2014. As a consequential change the following units were also to be made not available in 2014: PUBH4404 Population Health Honours Project Part 1 and PUBH4405 Population Health Honours Project Part 2.

RESOLVED – 15/13

that the honours specialisation Population Health and the units listed above be made not available in 2014.

5.3. FACULTY OF SCIENCE: PROPOSED NEW LEVEL 5 OPTION: SCIE5505 GLOBAL CHANGES AND MARINE ENVIRONMENT – Ref F52090

At its meeting of May 2013, the Board of Studies for the Bachelor of Science resolved by R7/13 that the proposed new unit SCIE5505 Global Changes and Marine Environment be approved for offering as an option within the Marine Science honours specialisation subject to confirmation that appropriate consultations with relevant disciplines had been undertaken by the proposer. Further to the Faculty's confirmation and noting a request at the meeting that the proposed unit be made available from semester 2, 2013, the Board

RESOLVED – 16/13

to recommend to the Board of Coursework Studies that SCIE5505 Global Changes and Marine Environment be approved as an option in the Marine Science honours specialisation from Semester 2, 2013.


The Board considered proposed changes, as attached to the agenda, to unit details for the following units offered within the Engineering Science major:

<table>
<thead>
<tr>
<th>Ref</th>
<th>Code</th>
<th>Title</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>F31522</td>
<td>ENSC1001</td>
<td>Engineering Challenges in a Global World</td>
<td>1</td>
</tr>
<tr>
<td>F31523</td>
<td>ENSC1002</td>
<td>Material Behaviour from Atoms to Bridges</td>
<td>1</td>
</tr>
<tr>
<td>F31524</td>
<td>ENSC2002</td>
<td>Energy</td>
<td>2</td>
</tr>
<tr>
<td>F31585</td>
<td>ENSC3002</td>
<td>Materials and Manufacturing</td>
<td>3</td>
</tr>
<tr>
<td>F31533</td>
<td>ENSC3007</td>
<td>Heat and Mass Transfer</td>
<td>3</td>
</tr>
<tr>
<td>F31534</td>
<td>ENSC3018</td>
<td>Process Synthesis and Design</td>
<td>3</td>
</tr>
<tr>
<td>F35284</td>
<td>ENSC3003</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>F31936</td>
<td>ENSC3004</td>
<td>Solid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>F31530</td>
<td>ENSC3017</td>
<td>Circuits and Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

The following points were noted in the ensuing discussion:

- The Board noted that the outcomes had been revised to bring the above units in line with accreditation requirements, but agreed that the outcomes should be rationalised with a view to formulating broad and clear statements and avoiding duplication and overlaps.
That the number of outcomes for each unit should be set at a realistic and achievable level (between five to seven outcomes). It was agreed that each of the above listed units should have not more than 10 outcomes.

That the associated field namely “assessment tied to outcomes” should be amended accordingly. It was noted that for a number units the final exam would address all outcomes including “work effectively as part of a team and communicate results in a concise technical report” (for example, ENSC3018 Process Synthesis and Design). It was unclear how such outcomes could be achieved via a formal examination.

[Executive Officer’s note: Since the meeting, the Faculty of Engineering, Computing and Mathematics has proposed a staged approach (stage 1 and stage 2) with a view to reducing the number of outcomes, where relevant. This approach has been approved by the Dean of Coursework Studies for 2014.]

RESOLVED – 17/13

• that the outcomes statements and the associate fields (that is, assessment tied to outcomes) for the above listed units offered within the Engineering Science major be further revised in line with the minuted feedback.

• that the proposed changes relating to content, outcomes, assessment, assessment tied to outcomes and prerequisites, as attached to the agenda, for the following units be approved: ENSC2001 Motion, ENSC3001 Mechanisms and Machines, ENSC3005 Mass and Energy Balances, ENSC3006 Chemical Process Thermodynamics and Kinetics, ENSC3008 Structural Analysis, ENSC3009 Geomechanics, ENSC3010 Hydraulics, ENSC3011 Resource Extraction Technologies, ENSC3012 Data Collection and Analysis, ENSC3013 Environmental Systems, ENSC3014 Electronic Materials and Devices, ENSC3015 Signals and Systems, ENSC3016 Electric Machines, ENSC3019 Unit Operations and Unit Processes.

7. FACULTY OF SCIENCE: PHYSICS MAJOR – Ref F29639, F32297, F32298, F32311, F36048, F32299

The Board considered changes to the objectives and outcomes of the Physics major. In addition it also considered changes to details of units offered within the major. The following feedback was noted in the ensuing discussion:

(i) The Board noted that the School had originally adopted a generic approach to formulating outcomes statements for most units offered within the Physics major. It also noted that the School had now amended the outcomes of the major to mirror the outcomes of the units within the Physics major.

(ii) It was pointed out that the outcomes statements for all units should be tailored specific to the academic objectives of the unit and mapped (not mirrored) against the outcomes of the major. Further, the assessment tied to outcomes statements should be amended accordingly.

(iii) In light of the proposed changes to the major and associated units, a review of the outcomes of all units and the major was considered to be timely.

RESOLVED – 18/13

that the outcomes statements of the major and the outcomes statements and associate fields (that is, assessment tied to outcomes) for all units within the major be reviewed in line with the above minuted feedback.

8. FACULTY OF SCIENCE: SCIENCE COMMUNICATION MAJOR – Ref F29688, F32387, F32388, F32390, F32063, F31687, F32172, F32384

In considering proposed changes to units details for units (SCOM2208 Science Writing, SCOM3319 Exhibitions and Interpretation, SCOM3320 Communications Strategies for Change and SCOM3322 Science Performance) offered within the Science Communication major, the Board noted that the
University Policy on changes to units states the following: “Any change to a prerequisite / corequisite within an undergraduate major or a postgraduate course must:
(a) ensure that the basis of the proposed change is academically sound;
(b) ensure sequential building of academic knowledge within the structure of an undergraduate major or postgraduate course;
(c) provide learning progression and academic coherence; and
(b) be in accordance with the approved structures for an undergraduate major or postgraduate course”.

The Board agreed that the proposed removal of prerequisites for SCOM2208 Science Writing would be problematic to ensure academic progression within the major. The Board suggested that the prerequisite statement for SCOM2208 Science Writing could be amended to read as follows: One of: COMM1901 Communication in Practice, ENSC1001 Engineering Challenges in a Global World, MKTG1203 Marketing Management, SCIE1103 Science, Society and Communication or SCOM1101 Introduction to Scientific Practices.

RESOLVED – 19/13

• that the proposed changes to unit details for SCOM3319 Exhibitions and Interpretation, SCOM3320 Communications Strategies for Change and SCOM3322 Science Performance be approved.
• that the prerequisites for SCOM2208 Science Writing be revised in line with the above minuted feedback.