Unit Outline 2014
Faculty of Health

Evidence Based Medicine 2
9001
1: General Information

1a Unit title: Evidence Based Medicine 2

1b Unit number: 9001

1c Teaching Period and year offered: Semester 2 2014

1d Credit point value: 3

1e Unit level: Undergraduate

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2: Academic Content

2a Unit description and learning outcomes
Evidence Based Medicine 2 (EBM2) builds on the knowledge and skills gained in Evidence Based Medicine 1. This unit provides the advanced skills to interpret clinical information and data published in the medical literature. Epidemiology and health economic principles will be introduced to facilitate the translation of research data to populations. Skills for communicating information to health professionals and the general public will be developed.

On completion of this unit, students will be able to:

1. Devise and conduct a systematic literature review;
2. Develop skills for communicating information to other health professionals and the general public; and
3. Understand the basic principles of epidemiology and health economics and how they apply to evidence based medicine.

2b Generic skills
This Unit addresses the generic skills and attributes of:

1. Communication
2. Analysis and inquiry
3. Problem solving
4. Working independently and with others
5. Professionalism and social responsibility

Further information on University of Canberra Generic Skills can be found at: http://www.canberra.edu.au/learning-teaching/uc-graduate-attributes

2c Prerequisites and/or co-requisites
Prerequisite: Evidence Based Medicine 1 (8999)

To attend placements at health facilities, the Faculty of Health Placement Office requires that students meet certain requirements which may include police checks and immunisations. For details refer to http://www.canberra.edu.au/faculties/health/community-connections/professional-placements

3: Delivery of Unit and Timetable

3a Delivery mode
This Unit will be delivered in blended learning mode with online activities available on the Unit’s Moodle page and weekly face to face on-campus workshops to consolidate knowledge.

The schedule is described in Section 3b.
Problem-based learning (PBL) format cases will be provided that will require independent research. Tutors may require students to show evidence of the completion of lecture pre reading or pre lecture exercises before being allowed to participate in tutorials. A timed Moodle drop box may be used for this purpose.

**Classes:** Mondays in Room 12-C-40 as per the table below OR alternative locations as noted (check on the Unit Moodle website).

### 3b Timetable of activities

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Moodle Content (1 hour equivalent)</th>
<th>Workshop (2 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 11-15</td>
<td>Introduction Medical databases</td>
<td>Selecting appropriate resources</td>
</tr>
<tr>
<td>2</td>
<td>Aug 18-22</td>
<td>Developing a search strategy</td>
<td>How do I handle 50,000 results?</td>
</tr>
<tr>
<td>3</td>
<td>Aug 25-29</td>
<td>Statistical vs clinical significance</td>
<td>Determining what really matters</td>
</tr>
<tr>
<td>4</td>
<td>Sep 1-5</td>
<td>Levels of evidence</td>
<td>Consumer sources of information</td>
</tr>
<tr>
<td>5</td>
<td>Sep 8-12</td>
<td>Research ethics</td>
<td>Ethics and systematic reviews</td>
</tr>
<tr>
<td>6</td>
<td>Sep 15-19</td>
<td>Literature interpretation</td>
<td>Data translation for the audience</td>
</tr>
<tr>
<td>7</td>
<td>Sep 22-26</td>
<td>Synthesising an answer</td>
<td>Drug information queries</td>
</tr>
<tr>
<td>8</td>
<td>Sep 29-Oct 3</td>
<td><strong>CLASS FREE PERIOD</strong></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Oct 6-10</td>
<td>Health economics</td>
<td>Hard decisions</td>
</tr>
<tr>
<td>10</td>
<td>Oct 13-17</td>
<td>Health economics</td>
<td>Winners and losers</td>
</tr>
<tr>
<td>11</td>
<td>Oct 20-24</td>
<td>Epidemiology</td>
<td>Population vs individual</td>
</tr>
<tr>
<td>12</td>
<td>Oct 27-31</td>
<td>Pharmacoepidemiology</td>
<td>Cost effectiveness</td>
</tr>
<tr>
<td>13</td>
<td>Nov 3-7</td>
<td>Screening tests</td>
<td>Predictive value and cost/benefit</td>
</tr>
<tr>
<td>14</td>
<td>Nov 10-14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Nov 17-21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Exam Period**

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### 4: Unit Resources

#### 4a Lists of required texts/readings

**Required text:**

Mayer D. Essential evidence-based medicine. 2nd ed. Cambridge: Cambridge University Press; 2010. (This will be referred to as “Essential EBM”). Available at the Co-op Bookshop and in the UC Library.

Call number: R723.7.M39 2010
Hoffman T, Bennett S, Del Mar C, editors. Evidence-based practice across the health professions. 2nd ed. Chatswood: Churchill Livingstone; 2013. Available at the UC Library. Call number: R723.5.H64 2013

**Recommended texts:**

Therapeutic Guidelines (current edition) or eTG. (pub: Therapeutic Guidelines Ltd, Victoria, Australia). (Computer access online via the library)


**4b Materials and equipment**
No additional materials or equipment is required for this Unit.

**4c Unit website**
This Unit requires that you can access the Unit website (i.e. via Moodle) at http://learnonline.canberra.edu.au/

Please also utilise the Pharmacy Subject Guide from University of Canberra Library at http://canberra.libguides.com/pharmacy and other specific websites as presented throughout the Unit.

**5: Assessment**

**5a Assessment overview**

<table>
<thead>
<tr>
<th>Assessment item (including exams held in the exam period)</th>
<th>Due date of assignments</th>
<th>Weighting (total to equal 100%)</th>
<th>Addresses learning outcome(s)</th>
<th>Addresses generic skill(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) MCQ statements</td>
<td>23:59 Sunday at the end of rostered week</td>
<td>5%</td>
<td>2,3</td>
<td>1,2,3,4,5</td>
</tr>
<tr>
<td>2) Mid-semester test</td>
<td>Week 6</td>
<td>10%</td>
<td>1,2,3</td>
<td>1,2,3,4,5</td>
</tr>
<tr>
<td>3) Final exam</td>
<td>Exam block</td>
<td>35%</td>
<td>1,2,3</td>
<td>1,2,3,4,5</td>
</tr>
<tr>
<td>4) Systematic review</td>
<td>23:59 Sunday at the end of week 10</td>
<td>50%</td>
<td>1,2,3,4</td>
<td>1,2,3,4,5</td>
</tr>
</tbody>
</table>

* - Students are responsible to monitor their due date and submit accordingly to avoid late penalties

**5b Details of each assessment item**

1. **MCQ statements (5% of final mark)**

Each student will be randomly allocated to a teaching week on a roster posted on the EBM2 Moodle site before week 1.

Students are required to submit **EIGHT** (8) TRUE and **EIGHT** (8) FALSE statements about the teaching content based on the Moodle lecture and tutorial of their rostered week. These statements will be pooled with other statements to generate test banks for Moodle exams (#2 and #3).
Marking will be an “all or none” system. If all the statements submitted are relevant to the subject material and there are 8 true and 8 false statements, students will be awarded 5%. If these criteria are not met, **ZERO** marks will be awarded.

2. **Mid-semester test (10% of final mark)**
A 20 minute mid-semester Moodle-based MCQ test with statements randomly drawn from the test banks described in #1. Format as per #3.

3. **Final exam (35% of final mark) **MUST PASS requirement**
A 60 minute Moodle-based MCQ exam with statements randomly drawn from the test banks described in #1. Questions will consist of FOUR (4) statements – either 3 false and 1 true **OR** 3 true and 1 false. These statements will be drawn randomly from the MCQ banks in Moodle. Each student will have a unique exam based on random allocation from the same statement banks; thus maintaining the same level of difficulty.

4. **Systematic review (50% of final mark)**
Students will conduct an abbreviated systematic review of the medical literature. Topics must be decided and confirmed with the unit convener by 5:00pm on the Friday of week 2.

**MARK PENALTY (final mark): 5% per full or part CALENDAR day the topic confirmation is overdue.**
The task description and a marking rubric will be available on the Unit Moodle site from week 1.

5c Submission of assessment items
All assessment items will be submitted online via the unit Moodle site. The first page of each assessment submission should include the following information:

- Student Name:
- Student ID:
- Assessment Name:
- Word Count (if applicable):

Any assessment item submitted **WITHOUT** the specified information on the first page will be returned to the student and not marked until this requirement is met. Late penalties will be applied (see 5d below).

5d Special assessment requirements
You are required to pass the following pieces of assessment to pass this Unit.

- Final Exam

Should you fail to pass this nominated assessment item, you will fail the Unit.

Mark deductions for late submissions.
Unless otherwise approved IN ADVANCE by the Unit Convener in writing, all assessment items are to be submitted at, or before, the due date and time. A 5% deduction of available marks will be imposed for each 24 hours (or part thereof) that a submission is late (in addition to any penalty imposed under #4, section 5b above). Submissions received later than seven (7) days after the due date will not be marked and will attract a grade of ZERO for that piece of assessment.

Extensions.
Students seeking extensions to assignments are urged to discuss this with their Unit Convener as soon as possible and must submit a Request for Extension with supporting documentation to the Unit Convener within 1 working day of the assessment deadline. Applications lodged after the due submission date will be considered only in exceptional circumstances with supporting documentation.
Students will receive written (email) notification regarding the outcome of their application (including any extension details approved) from the Unit Convener. Students are reminded that the Unit Convener is the sole authority for granting extensions and any recommendations included on documentation to support an extension (eg. a medical certificate) is not a guarantee that the Unit Convener will grant the same length extension.
Students should note that this policy does not apply to deferred exams which are centrally administered by the examinations office.

5d Supplementary assessment
As per the University of Canberra Assessment Policy, to be eligible for supplementary assessment a student must:
- be enrolled in their final semester of study;
- have failed a single Unit, with a final mark between 45-49% in the Unit;
- have passed all other Units undertaken in that semester.
The failed Unit must be the final Unit required to complete the academic requirements of their course.

5e Supplementary assessment
Refer to the UC Supplementary Assessment Policy

5f Academic Integrity
Students have a responsibility to uphold University standards on ethical scholarship. Good scholarship involves building on the work of others and use of others’ work must be acknowledged with proper attribution made. Cheating, plagiarism, and falsification of data are dishonest practices that contravene academic values. Please see UC’s Academic Integrity Policy.

To enhance understanding of academic integrity, it is expected that all students will complete the LearnOnline Academic Integrity Module (AIM) at least once during their course of study. The module is automatically available as a listed site when students log into LearnOnline.
Pharmacy students are required to complete the AIM Quiz using the link on the Pharmacy Students Moodle website to ensure results are collated for the Discipline. If students cannot access this website and AIM Quiz please inform the Unit Convener.

**Pharmacy students are expected to complete the AIM Quiz in the first two (2) weeks of their course and no submitted assessment pieces will be marked until the Quiz has been completed.**

5g **Use of text-matching software**
The University of Canberra has available, through LearnOnline (Moodle), text-matching software that helps students and staff reduce plagiarism and improve understandings of academic integrity. Known as URKUND, the software matches submitted text in student assignments against material from various sources: the internet, published books and journals, and previously submitted student texts. [Click here for further information on the URKUND text-matching software](#)

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### 6: Student Responsibility

6a **Workload**
The amount of time you will need to spend on study in this unit will depend on a number of factors including your prior knowledge, learning skill level and learning style. Nevertheless, in planning your time commitments you should note that for a 3cp unit the total notional workload over the semester or term is assumed to be 150 hours. These hours include time spent in classes. The total workload for units of different credit point value should vary proportionally. For example, for a 6cp unit the total notional workload over a semester or term is assumed to be 300 hours.

6b **Special needs**
Students who need assistance in undertaking the unit because of disability or other circumstances should inform their Unit Convener or UC AccessAbility [http://www.canberra.edu.au/accessability](http://www.canberra.edu.au/accessability) as soon as possible so the necessary arrangements can be made.

6c **Participation requirements**
This Unit contains participatory elements which are vital to the Australian Pharmacy Council professional learning outcomes for this Unit. Except in the case of extenuating circumstances, 100% attendance is expected at all lectures, and 100% participation is **required** in all placements, externships, tutorials, practicals and presentations. It is expected that students unable to fulfil these participation requirements will inform the Unit Convener as soon as practical, by telephone or email. If attendance requirements cannot be regularly satisfied (e.g. timetable clash) it may be recommended that you schedule this unit for a future semester. Absence from external placement activities must also be reported to the relevant clinical placement coordinator and preceptor. Failure to adhere to these requirements may result in failure of the associated assessment piece. Consideration will be given for illness; however evidence such as a medical certificate will be required.

Contact details for the Unit Convenor and the Faculty of Health Placement Administration Office are given in Section 1.
6d  Withdrawal
If you are planning to withdraw please discuss with your Unit Convener. Please see ‘Principal Dates’ on the university webpage and the link below for further information on deadlines.
http://www.canberra.edu.au/student-services/re-enrolment/determine_your_study_program_and_register_on_osis/withdrawal_of_units

6e  Required IT skills
Students should be conversant with searching for and accessing information via electronic means; the use of Moodle; and word processing, spreadsheet and presentation software.

6f  In Unit costs
The following costs are expected for this unit:
- Self-printing of electronically provided material; and
- Costs for internet access if required outside the UC campus

(Note: To calculate your unit fees see: How do I calculate my fees?.
The online UC Co-op Textbook Search is available for purchasing text books.)

Other than purchasing of text books, self-printing of electronically provided material, and any transport or other costs associated with experiential learning activities, no additional costs are expected.

6g  Work placements, internships, or practicums
This Unit contains does not contain Work Integrated Learning (WIL) activities (clinical placements and externships). However, if attendance requirements for EBM2 cannot be satisfied (e.g. timetable clash), it is recommended that you meet with your course convenor to schedule this Unit for a future semester.

6h  Additional information
Pharmacy Style Guide for report formatting
Unless otherwise approved (in writing), all written assessment pieces (formative and summative) must conform to the following requirements:
- Headings in bold, maximum font size 16 pt.
- Font size: 11 pt – Times New Roman, Arial or Calibri.
- Margins no less than 1.5cm on all sides.
- Page number at bottom right hand corner of footer.
- Student identification number (number only) at top right hand corner of header.

References given in NLM/Vancouver style (chronological numeric) ONLY. Information on this referencing styles can be found on the library website at
NOTE: Vancouver style referencing is the ONLY acceptable style for this unit.
- Faculty of Health coversheet to be completed fully and signed by the student. Submissions missing the properly completed Faculty of Health coversheet will not be accepted for marking until it is provide which may result in late submission penalties.

  **NOTE:** Cover sheets from other faculties will NOT be accepted for this unit.

- Any word limits specified in assignments (in this Unit Outline or in task descriptions on Moodle) will **INCLUDE** all tables, figures and appendices, but **EXCLUDE** references and the Faculty of Health cover sheet.

- Submissions which exceed the specified word (or page) length will be **truncated** at the word (or page) limit and **only assessed to this point**.

**Health Learning Resource Centre**

The Health Learning Resource Centre (HLRC) is located in 12C26. It is a facility designed to enhance the learning and university experience for health students with particular emphasis on students in their first year. A drop-in service of students helping students is also available. Visit the HLRC coordinator for more details.

**Mandatory Notifications to the Pharmacy Board of Australia**

Pursuant to the *Health Practitioner Regulation National Law Act 2009*, pharmacy practitioners (registered pharmacists) and education providers have an obligation to report ‘notifiable conduct’, to the Pharmacy Board of Australia in order to prevent the public being placed at risk of harm. Education providers are also required, under s.143 of the National Law, to make mandatory notifications in relation to students, if the provider reasonably believes:

a) a student enrolled with the provider has an impairment that, in the course of the student undertaking clinical training, may place the public at substantial risk of harm; or

b) a student for whom the provider has arranged clinical training has an impairment that, in the course of the student undertaking the clinical training, may place the public at substantial risk of harm.

Practitioners are required to make a mandatory notification in relation to a student if the practitioner reasonably believes that a student has an impairment that, in the course of the student undertaking clinical training, may place the public at substantial risk of harm.

All concerns raised within the Discipline of Pharmacy or by clinical preceptors will be reviewed by the Head of Discipline and the Course Convener before any reporting action is taken. These professional obligations are taken seriously by staff and the University. Students should be aware of their obligations under student registration.

For further information, please refer to the Australian Health Practitioner Regulation Agency Pharmacy Guidelines for Mandatory Notifications available at:

7: Student Feedback

All students enrolled in this unit will have an opportunity to provide anonymous feedback on the unit at the end of the Semester via the Unit Satisfaction Survey (USS) which you can access by logging into MyUC via the UC homepage: [http://www.canberra.edu.au/home/](http://www.canberra.edu.au/home/). Your lecturer or tutor may also invite you to provide more detailed feedback on their teaching through an anonymous questionnaire.

8: Authority of this Unit Outline

Any change to the information contained in Section 2 (Academic content), and Section 5 (Assessment) of this document, will only be made by the Unit Convener if the written agreement of Head of Discipline and a majority of students has been obtained; and if written advice of the change is then provided on the unit site in the learning management system. If this is not possible, written advice of the change must be then forwarded to each student enrolled in the unit at their registered term address. Any individual student who believes him/herself to be disadvantaged by a change is encouraged to discuss the matter with the Unit Convener.