Unit Outline

IMED3003 Advanced Drug Delivery Technology

Semester 2, 2016

Acknowledgement of Country

We respectfully acknowledge the Indigenous Elders, custodians, their descendants and kin of this land past and present.

Syllabus


Introduction

Welcome to Advanced Drug Delivery Technology. This is a significant unit which includes unique pharmaceutical knowledge. In addition you will learn skills which are essential competencies for pharmacists. The course provides a basis for the development of a wide range of skills that employers would expect of a person holding a Bachelor of Pharmacy degree. We hope you enjoy and are challenged by some of the topics this semester.

Unit Learning Outcomes

All graduates of Curtin University achieve a set of nine graduate attributes during their course of study. These tell an employer that, through your studies, you have acquired discipline knowledge and a range of other skills and attributes which employers say would be useful in a professional setting. Each unit in your course addresses the graduate attributes through a clearly identified set of learning outcomes. They form a vital part in the process referred to as assurance of learning. The learning outcomes tell you what you are expected to know, understand or be able to do in order to be successful in this unit. Each assessment for this unit is carefully designed to test your achievement of one or more of the unit learning outcomes. On successfully completing all of the assessments you will have achieved all of these learning outcomes.

Your course has been designed so that on graduating we can say you will have achieved all of Curtin’s Graduate Attributes through the assurance of learning process in each unit.

Pre-requisite units:

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<th>Pre-requisite Unit</th>
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<td>Clinical Pharmacokinetics and Toxicology or any previous version</td>
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<td>31998</td>
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Co-requisite units:

Nil

Anti-requisite units:

Nil

Result type:

Grade/Mark

Approved incidental fees:

Information about approved incidental fees can be obtained from our website. Visit fees.curtin.edu.au/incidental_fees.cfm for details.

Unit coordinator:

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Your course has been designed so that on graduating we can say you will have achieved all of Curtin’s Graduate Attributes through the assurance of learning process in each unit.
On successful completion of this unit students can:

1. Evaluate the factors which affect the stability, shelf-life, transport and storage of pharmaceuticals and vaccines
2. Discriminate factors that influence drug release from drug delivery systems and their uptake in the body
3. Kept compounders, sterilize and verify testing of sterile pharmaceutical products
4. Evaluate and communicate relevant pharmaceutical data from local and global perspectives
5. Apply physico-chemical principles to drug stability

Curtin’s Graduate Attributes

- Apply discipline knowledge
- Communication skills
- Culture and Cultural understanding
- International perspective
- Technology skills
- Professional Skills

Graduate Attributes addressed

- Thinking skills (plan own work)
- (value the perspectives of others)
- (work independently and as a team)
- (confidence to tackle unfamiliar problems)
- (apply principles learnt to new situations)
- (confidence to investigate new ideas)

Find out more about Curtin’s Graduate attributes at the Office of Teaching & Learning website: [curtin.edu.au](http://curtin.edu.au)

Learning Activities

Lectures and tutorials, laboratory practicals and workshops.

The unit will consist of lectures supported by Blackboard. Tutorials will develop a deeper understanding of the lecture topics such as drug stability especially the quantitative aspects. Laboratory sessions will include exercises that illustrate principles that influence drug stability, protein formulation and sterile compounding.

Learning Resources

Essential texts


Online resources

- Author’s Pharmaceutics: The Design and Manufacture of Medicines, 4e 2013. [catalogue.curtin.edu.au/primo_library/libweb/action/display.do?...](http://catalogue.curtin.edu.au/primo_library/libweb/action/display.do?tabs=detailsTab&ct=display&fn=search&doc=CUR_ALMA2180118150001951&indx=1&recIds=CUR_ALMA2180118150001951&recIdxs=0&elementId=0&renderMode=poppedOut&displayMode=full&frbrVersion=&frbg=&&dscnt=0&scp.scps=scope%3A%28cur_digitool_marc%29%2Cscope%3A%28CUR_ALMA_whc%29%2Cscope%3A%28CUR_ALMA_jbsc%29%2Cscope%3A%28CUR_ALMA%29%2Cscope%3A%28cur_digitool_dc%29%2Cscope%3A%28cur_libguides%29%2Cprimo_central_multiple_fe&vl(1UIStartWith0)=contains&dum=true&vl(freeText0)=%E2%80%A2%09Ansel%27s%20Pharmaceutical%20Dosage%20Forms%20and%20Drug%20Delivery%20Systems.%2010th%20Edn%202013&dstmp=1469075619922)

Assessment

Assessment schedule

<table>
<thead>
<tr>
<th>Task</th>
<th>Value %</th>
<th>Date Due</th>
<th>Unit Learning Outcomes Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory sessions</td>
<td>35 percent</td>
<td>Week: Depends on group</td>
<td>1,2,3</td>
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<tr>
<td>Test semester test</td>
<td>25 percent</td>
<td>Week: II</td>
<td>1,2,3,5</td>
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<tr>
<td>Examination</td>
<td>40 percent</td>
<td>Week: University final exam time table</td>
<td>1,2,3,5</td>
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</tbody>
</table>

Detailed information on assessment tasks

1. Online pre and post lab assignments, practical session product submission, workshop data analysis, quiz.
2. E-Test name: ADDT Midsemester eTest

Scheduled for: Semester 2, Week B

Duration: 3 days
Introduction to PowerPoint, Word and Excel
Using Blackboard, the I Drive and Back

All lectures, tutorials, workshops content will be assessed.

Late assessment policy
This ensures that the requirements for submission of assignments and other work to be assessed are clear, transparent, equitable, and that penalties are consistently applied.

1. All assessments are due on the due date and time specified on the Unit Outline.
2. Late submission of assessments is not accepted in this unit. Students will receive a zero mark for any assessment item submitted late.

Assessment extension
A student unable to complete an assessment task by the original published due date/time (eg examinations, tests) or due date/time (eg assignments) must apply for an extension. The request for an assessment extension must be made available from the Forms page at students.curtin.edu.au/assessment as prescribed by the Academic Registrar. It is the responsibility of the student to demonstrate and provide evidence for exceptional circumstances beyond the student's control that prevent them from completing/submitting the assessment task.

Deferred assessments
Deferred examinations/tests will be held from 09/12/2016 to 16/12/2016. Notifications will be made after the Board of Examiners' meeting via the Official Communications Channel (OCC) in OASIS.

Supplementary assessments
Students, if granted a supplementary assessment, will have a due date or be held between 09/12/2016 and 16/12/2016. Notification to students will be made after the Board of Examiners' meeting via the Official Communications Channel (OCC) in OASIS.

Reasonable adjustments for students with disabilities/health circumstances likely to impact on studies
A Curtin Access Plan (CAP) is a document that outlines the type and level of support required by a student with a disability or health condition to have equitable access to their studies at Curtin. This support can include alternative exam or test arrangements, study materials in accessible formats, access to Curtin’s facilities and services or other support as discussed with an advisor from Disability Services (disability.curtin.edu.au). Documentation is required from your treating Health Professional to confirm your health circumstances.

If you think you may be eligible for a CAP, please contact Disability Services. If you already have a CAP please provide it to the Unit Coordinator at the beginning of each semester.

Referencing style
The referencing style for this unit is Vancouver. More information can be found on this style from the Library web site: http://libguides/library.curtin.edu.au/referencing.

Copyright
© Curtin University. The course material for this unit is provided to you for your own research and study only. It is subject to copyright. It is a copyright infringement to make this material available on third party websites.

Academic Integrity (including plagiarism and cheating)
Any conduct by a student that is dishonest or unfair in connection with any academic work is considered to be academic misconduct. Plagiarism and cheating are serious offenses that will be investigated and may result in penalties such as reduced or zero grades, annulled units or even termination from the course.

Plagiarism occurs when work or property of another person is presented as one's own without appropriate acknowledgement or referencing. Submitting work which has been produced by someone else (e.g. allowing or contracting another person to do the work for which you claim authorship) is also plagiarism. Submitted work is subjected to a plagiarism detection process, which may include the use of text matching systems or interviews with students to determine authorship. Cheating includes (but is not limited to) asking or paying someone to complete an assessment task for you or any use of unauthorized materials or assistance during an examination or test.

From Semester 1, 2016, all incoming coursework students are required to complete Curtin's Academic Integrity Program (AIP). If a student does not pass the program by the end of their first study period of enrolment at Curtin, their marks will be withheld until they pass. More information about the AIP can be found at: https://academicintegrity.curtin.edu.au/students/AIP.htm.

Information and Communications Technology (ICT) Expectations
Curtin students are expected to have reliable internet access in order to connect to OASIS email and learning systems such as Blackboard and Library Services.

You may also require a computer or mobile device for preparing and submitting your work.

For general ICT assistance, in the first instance please contact OASIS Student Support: eetech-support.curtin.edu.au
For specific assistance with any of the items listed below, please contact The Learning Centre: lib.curtin.edu.au/learning-support-learning-centre.htm

- Using Blackboard, the I Drive and Back-Up Netz
- Introduction to PowerPoint, Word and Excel

Additional information
Enrolment
It is your responsibility to ensure that your enrolment is correct - you can check your enrolment through the elludent option on OASIS, where you can also print an Enrolment Advice.
Student Rights and Responsibilities

It is the responsibility of every student to be aware of all relevant legislation, policies and procedures relating to their rights and responsibilities as a student. These include:

- the Student Charter
- the University’s Guiding Ethical Principles
- the University’s policy and statements on plagiarism and academic integrity
- copyright principles and responsibilities
- the University’s policies on appropriate use of software and computer facilities

Information on all these things is available through the University’s “Student Rights and Responsibilities” website at: students.curtin.edu.au/rights.

Student Equity

There are a number of factors that might disadvantage some students from participating in their studies or assessments to the best of their ability, under standard conditions. These factors may include a disability or medical condition (e.g. mental illness, chronic illness, physical or sensory disability, learning disability), significant family responsibilities, pregnancy, religious practices, living in a remote location or another reason. If you believe you may be unfairly disadvantaged on these or other grounds please contact Student Equity at eesj@curtin.edu.au or go to http://eesj.curtin.edu.au/student_equity/index.cfm for more information.

You can also contact Counselling and Disability services: http://www.disability.curtin.edu.au or the Multi-faith services: http://life.curtin.edu.au/health-and-wellbeing/about_multifaith_services.htm for further information.

It is important to note that the staff of the university may not be able to meet your needs if they are not informed of your individual circumstances so please get in touch with the appropriate service if you require assistance. For general wellbeing concerns or advice please contact Curtin’s Student Wellbeing Advisory Service at: http://life.curtin.edu.au/health-and-wellbeing/student_wellbeing_service.htm

Recent unit changes

Students are encouraged to provide unit feedback through eVALUate, Curtin’s online student feedback system. For more information about eVALUate, please refer to evaluate.curtin.edu.au/info/

To view previous student feedback about this unit, search for the Unit Summary Report at https://evaluate.curtin.edu.au/student/unit_search.cfm. See https://evaluate.curtin.edu.au/info/dates.cfm to find out when you can view this unit.

Recent changes to this unit include:

1. Aseptic compounding practical exam has been introduced.
2. Written exercise included in a workshop to provide feedback to students on essay question.
3. A written exercise on application of skills and knowledge to train students.
**Program calendar**

**Advanced Drug Delivery Technology Semester Two 2016 Program calendar**

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<th>Week</th>
<th>Week commencing</th>
<th>Practical*</th>
<th>Lecture</th>
<th>Lecture</th>
<th>Lecture</th>
<th>Tutorial/Workshop*</th>
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<td>1 (32)</td>
<td>1 Aug</td>
<td>306.228/237</td>
<td>S&amp;AC 1 (VC)</td>
<td>S&amp;AC 2 (VC)</td>
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<td>3 (34)</td>
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<td>Drug Stability 3 (VC, VC)</td>
<td>S&amp;AC 3 (VC)</td>
<td>S&amp;AC 4 (VC)</td>
<td>Electrolyte Calculation (VC)</td>
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* Refer 3rd Year Group Time Table  
S&AC Sterilisation & Aseptic Compounding