### Unit Details

**Unit Index Number:** 310669  
**Credit Points:** 25 credit points upon successful completion of this unit  
**Unit Coordinator:** Dr T K S Mukkur [Associate Professor]  
**Address**  
School of Biomedical Sciences  
Curtin University of Technology  
GPO Box U1987  
PERTH WA 6845  
**Email:** T.Mukkur@curtin.edu.au  
**Phone:** (08) 9266.7520  
**Fax:** (08) 9266.2342

### Method of Assessment

To pass this unit you must complete the assessment tasks listed below.

<table>
<thead>
<tr>
<th>Assessment Tasks</th>
<th>Worth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student presentations</td>
<td>15%</td>
</tr>
<tr>
<td>Assignments [1]</td>
<td>40%</td>
</tr>
<tr>
<td>Final Examination</td>
<td>45%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
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Please read this outline fully before commencing your study in this unit.

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Welcome

Welcome to Emerging Diseases unit [EID] 631; this unit will cover both emerging as well as those infectious diseases that may have re-emerged such to pose a serious threat, similar to that posed by emerging infectious diseases, to the global community. The diseases covered will include selected bacterial, viral and protozoon diseases.

Contact

Please do not hesitate to contact me at any stage if you have any questions, queries or comments on the unit.

T K S Mukkur (Dr)
Unit Coordinator
Emerging Infectious Diseases

Requirements to Complete the Unit

Prerequisite skills
The content covered in EID 631 assumed that students have a basic knowledge of medical microbiology, and molecular biological and immunological concepts underpinning host defense mechanisms.

Technology
It is essential, that you have access to:

• a computer with an Internet connection, which you can use effectively search resources available on the internet such as PubMed, Cochrane databases etc.,

• email address permitting contact with your lecturers and other students studying the same unit.

You can access the computing facilities on campus if you do not have access to a computer at home.

Aims

The overall aim of the EID 631 unit is to build knowledge base on the clinical features of emerging and select re-emerging infectious diseases, aetiological agents, incidence, complications, epidemiology, transmission, risk groups, surveillance, trends, clinical management, and challenges and opportunities presented by these infectious diseases for advancement of the prevention strategies.

This unit emphasizes the importance learning the arts of [1] public presentation acquired through presentation of seminars and [2] written communication acquired via writing of two [2] review assignments using scientific literature. These tasks should improve student’s abilities to retrieve, analyse and evaluate relevant information, enhance problem solving and decision making skills, and provide additional opportunities for peer evaluation of presentation by your colleagues. These skills need to be combined with
good written and verbal communication abilities and effective interpersonal skills. Scientists with these skills are valued employees and are sought after by employers.

Unit Outcomes

Learning outcomes (Content knowledge)
This unit is designed to provide you with the major current EIDs, factors that impact their emergence or re-emergence, their clinical features, incidence, epidemiology, clinical management, and potential preventative strategies. This unit is journal-based and there is no assigned textbook for this unit. However, the list of significant textbooks and journals that you may need to consult may depend upon the topic under coverage.

Professional skills outcomes
On successful completion of this unit you will have completed tasks leading to the development of the following skills:

**Effective communication**
Communicating with your lecturer and other students enrolled in EID 631.
Use of written, verbal and electronic media

**Analysis and evaluation of information**
Accessing, analysing and critically evaluating relevant information
Completing self-study

**Problem solving and decision making**
Setting aside time to study, research and review topic items
Reviewing lecture materials
Completion of assessments

**Peer Reviewing**
Each student presentation will be peer reviewed and marked by the other students enrolled in the unit, with the final decision on the mark being made by the coordinator of the unit

**Awareness of issues affecting health professionals**
Development of high ethical standards
Knowledge of the inter-relationship between science disciplines and their interrelationships
Syllabus

Unit Materials
Unit syllabus [see the lecture schedule for topics to be covered in the unit]

Textbook
There is no prescribed textbook for this unit because the unit is essentially journal-based. The list of the significant journals that may need consulting are as follows:

Annual Reviews - Microbiology
AIDS Annals of Internal Medicine
American Journal of Public Health
 Archives of Microbiology
 British Medical Journal
 Canadian Journal of Microbiology
 Clinical Infectious Diseases
 Clinical Microbiology Reviews
 Communicable Diseases Intelligence
 [http://canarydatabas e.org/browse/journal/0725-3141
 Communicable Disease Report (CDR) Current Biology
 Current Infectious Disease Reports
 Current Microbiology
 Diagnostic Microbiology and Infectious Disease
 Emerging Infectious Diseases
 [http://www.cdc.gov/ncidod/EID/index.htm]
 European Journal of Medical Research
 FEMS Microbiology Reviews
 HIV/AIDS Surveillance Report
 Infection and Immunity
 Institute of Medicine of the National Academies
 [http://www.iom.edu/CMS/3783/3924/5438.aspx]
 International Journal of HIV & AIDS
 Journal of AIDS/HIV
 Journal of the American Medical Association [JAMA]
 Journal of Clinical Microbiology
 Journal of Clinical Virology
 Journal of General Virology
 Journal of Infectious Diseases
 Journal of Medical Microbiology
 Journal of Medical Virology
 Journal of Virology
 Medical Microbiology and Immunology
 Medical Journal of Australia
 Microbes and Infection
 Morbidity and Mortality Weekly Reports from the CDC
 National Centre for Immunisation Research [NCIRS]
 Nature
 Nature MicrobiologyReviews
 New England Journal of Medicine
 New Scientist

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Reviews in Medical Virology
The Infectious Disease Review
The Lancet Infectious Diseases
Trends in Microbiology
Veterinary Microbiology
Virology
Weekly Epidemiological Record (WHO)

**AND MANY MORE CONTINUOUSLY UPcomings FREE ACCESS JOURNALS**

The textbooks that may be helpful are as follows:

1. Principles and Practice of Infectious Diseases Vol 1 and 2, Sixth Edition, 2005
5. Other resources given by the guest lecturers
6. For assignments and seminar presentations: consult PubMed and Cochrane databases
   http://www.cochrane.org/reviews/
Wilkepedia will not be accepted.

**Web-based resources**
The Unit Coordinator maintains a Web site for use by the enrolled students. You will be informed about specifics of the site in the class. Because of the small number of students, the lecture material may be provided in the class by the lecturer. However, please make sure to check the blackboard for announcements, lecture notes etc., The distribution of the seminar notes prepared by the students will also be handed out to the class via the unit coordinator.

**Contact Details**
The unit coordinator for Immunobiology 233 is Dr T K S Mukkur [Associate Professor] in the School of Biomedical Sciences at Curtin. During the semester you may need to contact Dr Mukkur for various reasons. He can be contacted via email [preferred option] or in person; if absolutely necessary by phone or fax.

Office 308.208
Email: T.Mukkur@curtin.edu.au
Phone (08) 9266 7520 (office)
Fax (08) 9266 2342
EMERGING INFECTIOUS DISEASES 631

Study Load

You will need to spend about 6 hours a week outside of scheduled classes in preparing the seminar and studying in this unit to be successful. It is important that you keep up with program as it is very difficult to catch up on lost or wasted time. You may need more time per week if you haven't acquired a strong background in medical microbiology, and fundamental molecular biological and immunological concepts.

Delivery of Unit

Tuition pattern

Four (4) hours per week allocated as follows:
• Lecture 1x 2 hours
• Tutorial 1 x 1 hours

Seminar presentation by students is a part of the tutorial time.

Lectures

Attendance at all lectures is strongly recommended particularly because a number of outside experts on different topics have been invited to make presentations.

Assessment Format

To pass this unit you must complete the assessment tasks listed below.

Assessment Tasks | Worth
--- | ---
Student presentations [1] | 15 %*
Assignment [1] | 40%
Final Examination | 45 %*
TOTAL | 100%

Students are expected to achieve a pass standard in each of the assessments to complete EID 631 unit. Note that a mark of 50% or more in all the components of the unit is required in order to secure a pass. Failure in any one area may result in an overall failure in this unit regardless of the total marks accrued. Students whose performance in any assessment is unsatisfactory may fail the entire unit or be required to complete additional assessment(s) to a satisfactory standard.

Assessment Details

Student Presentations/Seminars

Each student will participate in the delivery of one seminar worth 15% each in the unit. Students may be required to present seminars as groups of 2 or 3, depending upon the enrollment in the unit. The presentation time will be 40 minutes with a 10 minute question period. Grading of the seminar presentation will be done by your classmates.
as well as by the lecturer. However, the final mark of the seminar presentation will be the decision of the lecturer.

**Assignment**
Each student will be required to submit one major review paper [5,000 word limit] on one of the allocated topics. The assignments will be worth 40% of the total assessment of the unit. The assignment details and instructions on the preparation of the review paper will be during the lecture period.

**Final examination**
The final theory examination will be worth 45% of the total assessment mark for the unit, depending upon the number of students enrolled in the unit. Forty percent [40%] of the questions in the final examination will cover the topics presented as seminars by students.

**Due dates**
You should note the following dates regarding assignments, assessments and examinations:
- Assignments: As requested
- Seminars: As shown in the Lecture Schedule
- Final Examination: Within official University examination period

**Mobile Phones**
If you have a mobile, please ensure that it is TURNED OFF [unless there is an emergency] during lecture and practical sessions as a courtesy to both lectures and other students. Students who do not comply with this request can be asked to leave the class.

**Copyright Requirements**
As a student of Curtin you must be familiar with the requirements of the University's Copyright Procedures. Guidance is available to you at the following web page [http://lisweb.curtin.edu.au/copyright/] under the heading Information for All Students. Curtin's Copyright Procedures can be found under the heading Related Curtin Policies and Procedures whilst the Copyright Act can be accessed from the Additional information heading at that web site should you wish to understand the source of the Procedures. Failure to comply with the University's policies and procedures on Copyright and IT/IS use may include suspension or termination of enrolment, fines, withdrawal of privileges for use of the University's ICT facilities and services and, depending on what is copied, stored or communicated, may also render you liable to prosecution in the courts.

**Plagiarism Policy** (as adopted by the School of Biomedical Sciences)
It is not acceptable to simply copy the words of other students or authors when completing the weekly exercises and assignments in this unit. This action constitutes plagiarism and is regarded as academic malpractice. The penalties for plagiarism can be severe and may include termination from your course of study. All direct quotes must be correctly attributed to the author and should be kept to a minimum. Also, you should include a list of references to acknowledge the source(s) of information used to produce any written work.
The School of Biomedical Sciences advises students that it will use screening software to check for plagiarism in submitted work suspected of containing plagiarised material and also for routine screening of text as deemed appropriate by the Head of School.

Useful examples and explanations of plagiarism may be seen at the following web site – These will help you in understanding the nature of this form of academic malpractice.

http://www.indiana.edu/~wts/wts/plagiarism.html

As a guide only, typical penalties which may be imposed by the School of Biomedical Sciences for some of the more common types of plagiarism (including collusion) are shown in the Table below. Please note that each case of academic malpractice is assessed individually, and that penalties actually imposed by the Head of School (or delgatee) may vary from the examples shown in the Table.

<table>
<thead>
<tr>
<th>Example</th>
<th>Degree of seriousness</th>
<th>Typical Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students submitting very similar work (even as a result of legitimate co-operation)</td>
<td>Collusion Minor to Severe depending on context</td>
<td>Loss of marks for that question or assignment etc by both students</td>
</tr>
<tr>
<td>Not referencing input (factual statements, definitions etc) where students’ words are used</td>
<td>Minor to Intermediate</td>
<td>Loss of 5% of assessment entity for each instance</td>
</tr>
<tr>
<td>Not referencing input where plagiarised words are used</td>
<td>Depends on context, but may be serious</td>
<td>Loss of 50 – 100% of marks for that question or assignment as appropriate</td>
</tr>
<tr>
<td>Not acknowledging ideas or concepts of others (ie. stealing intellectual property)</td>
<td>Serious misconduct</td>
<td>Loss of marks plus an additional penalty which could entail failure of unit and/or possible termination from course depending on the circumstances</td>
</tr>
</tbody>
</table>

Supplementary Examinations

Supplementary examinations are awarded only at the discretion of the Board of Examiners. The aim of a supplementary examination is to allow the student or correct minor problems/deficiencies in the initial assessment and not to gain extra study time or correct major problems. The number of supplementary examinations awarded will be kept to a minimum for any one examination period and for this course of study.

NB Supplementary examinations are not automatically awarded. The Board of Examiners will carefully review individual cases. No written application for supplementary examination will be considered.

Supplementary examinations, if awarded, will be indicated on the official Curtin Examination result statement posted to all students, and will also be listed on the School notice board 24 hours after the Board of Examiners meeting. It is your responsibility to check your status. Students should note that supplementary examinations for units conducted in the School will be held at times to be advised. A student who does not sit for a scheduled supplementary examination has no claim to a further examination. If you are awarded a supplementary examination it is imperative that you confirm the time and venue for the exam.
Deferred Assessment

Deferment of an examination is not automatic. Students may be permitted by the relevant Board of Examiners to defer an examination or other assessment where circumstances outside their control have arisen. However, a student's overall performance may be taken into account in granting permission to defer an examination.

Applications for deferment on health grounds or as a result of extenuating circumstances must be submitted not later than seven (7) days after the end of the relevant examination period or assessment date during the semester. **Detailed** medical certificates should be attached to the application where appropriate.
## EMERGING INFECTIOUS DISEASES 631; LECTURE TOPICS- SEM 1 - 2011

<table>
<thead>
<tr>
<th>Week Curtin No.</th>
<th>Date (2011)</th>
<th>Lecture or Activities</th>
<th>LECTURE SCHEDULE (2 x L + 1 x T) LECTURE: TUESDAY TIME: 10AM-12 NOON TUTORIAL: 3PM-4PM VENUE: 108.113</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 week</td>
<td></td>
<td>Orientation Week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>March 1</td>
<td>1</td>
<td>-Emerging Sexually Transmissible Infectious Diseases Exemplar III – HPV Exemplar IV-Gonorrhoea &amp; Chlamydiosis -Introduction Organisation and prototype seminar presentation method</td>
<td>BB</td>
</tr>
<tr>
<td>2</td>
<td>March 8</td>
<td>2</td>
<td>Introduction and highlights of current emerging infectious diseases &amp; Factors contributing to emerging and re-emerging infectious diseases</td>
<td>TKSM</td>
</tr>
<tr>
<td>3</td>
<td>March 15</td>
<td>3</td>
<td>Categorization and special considerations of the significant emerging and re-emerging infectious diseases</td>
<td>TKSM</td>
</tr>
<tr>
<td>4</td>
<td>March 22</td>
<td>4</td>
<td>Contribution of microbial resistance to emerging infectious diseases</td>
<td>TKSM</td>
</tr>
<tr>
<td>5</td>
<td>March 28</td>
<td>4</td>
<td>Emerging faecal-oral route Infectious Diseases Exemplar I – Enterovirus infections -ROTAVIRUS DIARRHOEA &amp; MANAGEMENT STRATEGIES</td>
<td>BC</td>
</tr>
<tr>
<td>6</td>
<td>April 5</td>
<td>5</td>
<td>Emerging Air-borne Bacterial Infectious Diseases Exemplar II: Whooping cough -RSV INFECTIONS &amp; MANAGEMENT STRATEGIES</td>
<td>TKSM</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Day</th>
<th>Topic</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>April 19</td>
<td>7</td>
<td>Emerging Air-borne Infectious Diseases Exemplar V- Exotic Diseases [SARS and Avian Influenza] - H5N1 Infection &amp; Management Strategies</td>
<td>DW</td>
</tr>
<tr>
<td>8,9</td>
<td>April 22-29</td>
<td></td>
<td><strong>TUITION-FREE WEEK</strong></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>May 3</td>
<td>8</td>
<td>Emerging Vector-borne bacterial Infectious Diseases Exemplar VI- Tularemia Exemplar VII- Lyme Disease - Malaria &amp; Management Strategies</td>
<td>TKM</td>
</tr>
<tr>
<td>11</td>
<td>May 10</td>
<td>9</td>
<td>Emerging Vector-borne viral Infectious Diseases Exemplar VIII- Viral Encephalitis</td>
<td>DW</td>
</tr>
<tr>
<td>12</td>
<td>May 17</td>
<td>10</td>
<td>Emerging Vector-borne Viral Infectious Diseases [Contd.] Exemplar IX-Dengue Fever - West Nile Fever &amp; Management Strategies</td>
<td>AI</td>
</tr>
<tr>
<td>13</td>
<td>May 24</td>
<td>11</td>
<td><strong>REVIEW SESSION + FINAL EXAMINATION FORMAT - ASSIGNMENT TURN-IN DAY</strong></td>
<td>TKSM</td>
</tr>
</tbody>
</table>

**FINAL EXAMINATION (2 hour, Essay Questions) DURING THE EXAMINATION PERIOD**

AI: Alison Imrie; BC: Dr Beng Chua; DW: David Williams; TKM: Trilochan Mukkur

**Note:**
- Seminars will be delivered by students in groups of 2-3 students per group.
- Approximately 40% of questions in the final examination will be sourced from the student seminar presentations.