Course Outline

Code: BIM371
Title: Clinical Embryology

School: Health & Sport Sciences
Teaching Session: Session 8
Year: 2020
Course Coordinator: Dr Anna Kuballa akuballa@usc.edu.au
Course Moderator: Dr Mark Holmes mholmes@usc.edu.au

Please go to the USC website for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1 Description
Clinical embryology introduces you to the application of assisted reproductive technologies (ARTs) used by embryology laboratories throughout the world. On completion of this course, you will be able to demonstrate and evaluate current knowledge of human reproduction; molecular genetics in clinical embryology; regulation, ethics and quality management of ART; early reproductive events and ART; assessment of embryo quality; and cryopreservation.

1.2 Field trips, WIL placements or activities required by professional accreditation

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td>Nil</td>
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</table>

2. What level is this course?

300 level Graduate - Independent application of graduate knowledge and skills. Meets AQF and professional requirements. May require pre-requisites and developing level knowledge/skills. Normally taken in the 3rd or 4th year of an undergraduate program.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

<table>
<thead>
<tr>
<th>Specific Learning Outcomes</th>
<th>Assessment tasks</th>
<th>Graduate Qualities or Professional Standards mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>On successful completion of this course, you should be able to:</td>
<td>You will be assessed on the learning outcomes in task/s:</td>
<td>Completing these tasks successfully will contribute to:</td>
</tr>
<tr>
<td>Demonstrate and apply the practical skills and competencies used in embryology laboratories.</td>
<td>Task 1: Practical/laboratory skills portfolio</td>
<td>Empowered Engaged</td>
</tr>
<tr>
<td>Describe and interpret the underlying scientific principles of assisted reproductive technologies.</td>
<td>Task 1: Practical/laboratory skills portfolio Task 2: Examination</td>
<td>Knowledgeable</td>
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</tbody>
</table>
Specific Learning Outcomes
On successful completion of this course, you should be able to:

<table>
<thead>
<tr>
<th>Assessment tasks</th>
<th>Graduate Qualities or Professional Standards mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 3: Oral presentation</td>
<td>Creative and Critical Thinkers Empowered</td>
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</table>

Critically analyse and evaluate assisted reproductive technology practices and quality control principles.

<table>
<thead>
<tr>
<th>Assessment tasks</th>
<th>Graduate Qualities or Professional Standards mapping</th>
</tr>
</thead>
</table>
| Task 1: Practical/laboratory skills portfolio  
Task 2: Examination  
Task 3: Oral presentation | Ethical |

Identify, describe and evaluate the ethical and regulatory principles that apply to the clinical embryology setting.

<table>
<thead>
<tr>
<th>Assessment tasks</th>
<th>Graduate Qualities or Professional Standards mapping</th>
</tr>
</thead>
</table>
| Task 1: Practical/laboratory skills portfolio  
Task 3: Oral presentation | Ethical |

5. Am I eligible to enrol in this course?
Refer to the USC Glossary of terms for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1 Enrolment restrictions
Nil

5.2 Pre-requisites
LFS202 or LFS203 or enrolled in Program SC357

5.3 Co-requisites
Nil

5.4 Anti-requisites
Nil

5.5 Specific assumed prior knowledge and skills (where applicable)
It is recommended that students have prior knowledge and skills in human physiology, human genetics, and biochemistry.

6. How am I going to be assessed?

6.1 Grading scale
Standard – High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL)

6.2 Details of early feedback on progress
In weeks 2 and 3 of this course you will participate in tutorial and laboratory classes, these classes have both formative and summative components based on the topics and content covered to date. These will provide you with an opportunity to revise your understanding of each topic.

6.3 Assessment tasks

<table>
<thead>
<tr>
<th>Task No.</th>
<th>Assessment Product</th>
<th>Individual or Group</th>
<th>Weighting %</th>
<th>What is the duration / length?</th>
<th>When should I submit?</th>
<th>Where should I submit it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1</td>
<td>Practical / Laboratory Skills</td>
<td>Individual</td>
<td>50%</td>
<td>Up to 2000 words</td>
<td>Weeks 2, 3 and 6</td>
<td>In Class</td>
</tr>
<tr>
<td>Task 2</td>
<td>Examination</td>
<td>Individual</td>
<td>30%</td>
<td>Multi-choice and short answer questions</td>
<td>Week 3 of Session 8</td>
<td>In Class</td>
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<tr>
<td>Task 3</td>
<td>Oral</td>
<td>Choice</td>
<td>20%</td>
<td>15 min + 2 min question time</td>
<td>Exam week of Session 8</td>
<td>In Class</td>
</tr>
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</table>

**Assessment Task 1:** Practical/ laboratory skills portfolio

**Goal:** You will develop practical laboratory skills, assess and apply quality control measures and ethical practices, and will demonstrate competency in laboratory techniques that are relevant to assisted reproductive technology.

**Product:** Practical/Laboratory Skills

**Format:** Individual professional competencies demonstrated through the completion of a training manual/logbook style laboratory workbook. Key elements include the successful completion of laboratory inductions and practical demonstrations of laboratory skills.

**Criteria:** Your practical skills/laboratory portfolio will be assessed on:
- Demonstration of practical laboratory competencies
- Description and assessment of quality control measures
- Identification and appraisal of ethical practices
- Analysis of scientific principles relevant to embryology practices

**Assessment Task 2:** Examination

**Goal:** This exam will explore the theoretical knowledge of the physiology, anatomy, histology, endocrinology and molecular genetics associated with human male and female reproductive systems and the scientific principles behind assisted reproductive technologies.

**Product:** Examination

**Format:** An individual, closed book, mid-semester examination composed of multiple-choice and short answer style questions. The examination will cover course material delivered during the lectures, tutorial and practical classes held in the first half of the course.

**Criteria:** Your exam is designed to assess the following criteria:
- Description and interpretations of theoretical knowledge about the physiology, anatomy, histology, endocrinology and molecular genetics associated with human reproduction, and assisted reproductive technologies
- Analysis of information and explanation of important elements of human reproduction

**Assessment Task 3:** Oral presentation

**Goal:** To research and develop a deeper understanding of an important embryology technique, to integrate relevant assisted reproductive technology principles that have been addressed throughout the course, and to identify and evaluate ethical and regulatory principles of clinical embryology.

**Product:** Oral

**Format:** A 15 min oral presentation followed by 5 min of open question time that critically analyses and discusses the scientific basis of an aspect (or aspects) of an assisted reproductive technology (ART). The oral presentation can be completed either individually or in pairs (for pairs it is expected that each student in the pair contribute equally to the presentation).
Your presentation should be directed at the level of a professional audience (e.g. clinical embryologists).

**Criteria:** Your presentation will be assessed according to the following criteria:
- Scientific merit of the content (description, interpretation and analysis)
- Description of ethical principles
- Scientific communication skills and time management

7. **Directed study hours**

The directed study hours listed here are a portion of the workload for this course. A 12 unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Directed study hours may vary by location. Student workload is calculated at 12.5 learning hours per one unit.

The lectures for this course will be delivered via technology-enabled learning and teaching. Practical classes will be offered on campus as permitted by government guidelines.

<table>
<thead>
<tr>
<th>Location</th>
<th>Directed study hours for location:</th>
</tr>
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<tbody>
<tr>
<td>Sippy Downs</td>
<td>Lecture - 20 hrs in total</td>
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<tr>
<td></td>
<td>Practical - 19 hrs in total</td>
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<tr>
<td></td>
<td>Tutorial - 10 hrs in total</td>
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<td></td>
<td>See Blackboard for details</td>
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</table>

8. **What resources do I need to undertake this course?**

Please note that course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Blackboard site. Please log in as soon as possible.

8.1 **Prescribed text(s) or course reader**

Please note that you need to have regular access to the resource(s) listed below as they are required:

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
<th>Publisher</th>
</tr>
</thead>
</table>

8.2 **Specific requirements**

You will be expected to purchase the BIM371 Course Practical Manual from USC Mail and Print Services (MaPS). In addition, you will be required to bring a laboratory coat, safety glasses and closed non-slip footwear to the course practical classes.

9. **How are risks managed in this course?**

Risk assessments have been performed for all laboratory classes and a moderate level of health and safety risk exists, such as working with chemicals and hazardous substances. You will be required to undertake laboratory induction training.

It is your responsibility as a student to review course material, search online, discuss with lecturers and peers, and understand the health and safety risks associated with your specific course of study. It is also your responsibility to familiarise yourself with the University’s general health and safety principles by reviewing the [online Health Safety and Wellbeing training module for students](#), and following the instructions of the University staff.
10. **What administrative information is relevant to this course?**

10.1 **Assessment: Academic Integrity**

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Blackboard, are electronically checked through SafeAssign. This software allows for text comparisons to be made between your submitted assessment item and all other work that SafeAssign has access to.

10.2 **Assessment: Additional requirements**

**Eligibility for Supplementary Assessment**

Your eligibility for supplementary assessment in a course is dependent on the following conditions applying:

a) The final mark is in the percentage range 47% to 49.4%

b) The course is graded using the Standard Grading scale

c) You have not failed an assessment task in the course due to academic misconduct

10.3 **Assessment: Submission penalties**

Late submission of assessment tasks will be penalised at the following maximum rate:

- 5% (of the assessment task’s identified value) per day for the first two days from the date identified as the due date for the assessment task.
- 10% (of the assessment task’s identified value) for the third day
- 20% (of the assessment task’s identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task.
- A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task.

Weekdays and weekends are included in the calculation of days late.

To request an extension, you must contact your Course Coordinator and supply the required documentation to negotiate an outcome.

10.4 **Study help**

In the first instance, you should contact your tutor, then the Course Coordinator. Additional assistance is provided to all students through Academic Skills Advisers. To book an appointment or find a drop-in session go to [Student Hub](#).

Contact Student Central for further assistance: +61 7 5430 2890 or [studentcentral@usc.edu.au](mailto:studentcentral@usc.edu.au)

10.5 **Wellbeing Services**

Student Wellbeing Support Staff are available to assist on a wide range of personal, academic, social and psychological matters to foster positive mental health and wellbeing for your success. Student Wellbeing is comprised of professionally qualified staff in counselling, health and disability Services.
Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, mental health issue, learning disorder, injury or illness, or you are a primary carer for someone with a disability, AccessAbility Services can provide assistance, advocacy and reasonable academic adjustments.

To book an appointment with either service go to Student Hub, email studentwellbeing@usc.edu.au or accessability@usc.edu.au or call 07 5430 1226

10.6 Links to relevant University policy and procedures
For more information on Academic Learning & Teaching categories including:
- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Administration of Central Examinations
- Deferred Examinations
- Student Academic Misconduct
- Students with a Disability

Visit the USC website:
http://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching

10.7 General Enquiries
In person:
- USC Sunshine Coast - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- USC Moreton Bay – Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- USC SouthBank - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- USC Gympie - Student Central, 71 Cartwright Road, Gympie
- USC Fraser Coast - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- USC Caboolture - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890
Email: studentcentral@usc.edu.au