313399 Integrated Systems Anatomy and Physiology 100

Semester Two, 2012

Unit study package number: 313399
Mode of study: Internal
Tuition pattern summary: 1 x 1 hr lecture (weekly)
1 x 2 hr laboratory (practical) (weekly)
1 x 1 hr tutorial (weekly)

Credit value: 25
Pre-requisite units: Human Structure and Function 100
OR Human Biology 133 or Equivalent
Co-requisite units: none
Anti-requisite units: none
Additional Requirements: none
Result type: Grade and mark
Approved incidental fees: All fee information can be obtained through the Fees Centre. Visit fees.curtin.edu.au for details.

Unit Coordinator:
Name: Gary Whittaker
Phone: 9266 1848
Email: ISAP100@curtin.edu.au
Building: Room: 308. 113
Consultation times: By Appointment.

Administrative contact:
Name: Rayne Stradwick
Phone: 9266 3172
Email: ISAP100@curtin.edu.au
Building: Room: 400.205

Learning Management System: FLECS - Blackboard oasis.curtin.edu.au

Assessment Centre Completion Dates:
E1: 10/8/12
E2: 7/9/12
E3: 28/9/12
(FINAL: No extensions)
Syllabus
An integrated approach to the study of body systems correlating structure and function of the musculo-skeletal, cardiovascular, respiratory, urinary, digestive, and reproductive systems together with their endocrine & neural control. Students will investigate the interaction of these systems in normal body functioning and in selected altered body states.

Introduction
Integrated Systems Anatomy & Physiology 100 approaches structure as it supports body functions critical to the maintenance of the individual and the species, using an integrative approach, focussing on homeostasis and regulatory mechanisms. This unit has lectures on topics linked to laboratory activities followed by tutorials, using a problem-solving approach to consolidate concepts and apply these to everyday experiences. The unit requires active learning. Students are expected to supplement basic concepts presented in lectures by guided reading and online activities in preparation for laboratory and tutorial classes.

<table>
<thead>
<tr>
<th>Unit Learning Outcomes</th>
<th>Graduate Attributes addressed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>On successful completion of this unit students can:</td>
<td></td>
</tr>
<tr>
<td>1. Discuss the functional anatomy of the body systems.</td>
<td></td>
</tr>
<tr>
<td>2. Explain how the musculoskeletal and articular systems provide a framework for movement and stability.</td>
<td></td>
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<tr>
<td>3. Explain the physiology of movement, circulation, respiration, digestion, elimination, excretion, reproduction and their neural and endocrine control.</td>
<td></td>
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<tr>
<td>4. Demonstrate an understanding of how body systems interact to maintain homeostasis.</td>
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<tr>
<td>5. Predict the responses of the cardiovascular, respiratory, digestive and urinary systems to homeostatic challenge.</td>
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</tbody>
</table>

Curtin’s Graduate Attributes

- Apply discipline knowledge
- Thinking skills (use analytical skills to solve problems)
- Information skills (confidence to investigate new ideas)
- Communication skills
- Technology skills
- Learning how to learn (apply principles learnt to new situations) (confidence to tackle unfamiliar problems)
- International perspective (value the perspectives of others)
- Cultural understanding (value the perspectives of others)
- Professional skills (work independently and as a team) (plan own work)

Find out more about Curtin’s Graduate attributes at the Office of Teaching & Learning website: [otl.curtin.edu.au](http://otl.curtin.edu.au)
Learning Activities
This unit will have a weekly module comprising: 1-hour lecture/iLecture with guided learning on a topic designed to answer an overarching question. Each lecture will be linked to a 2-hour practical activity, followed by a 1-hour tutorial, which may include scenarios or case studies to provide context and opportunity for integrated learning and reasoning, to enable the question to be answered. The practicals and tutorials will be student-centred but tutor-guided.

All materials covered in each topic will be accessible from the Blackboard (Bb) Unit Materials/Learning Hub link.

Learning Resources
Lectures, “hands on” anatomy and physiology lab (practical) sessions; tutorials, online resources and virtual laboratory experiences

Essential Texts

Recommended Texts
You do NOT have to purchase the following textbooks but you may wish to refer to them.

- Dirckz, J (ed) (2008) Stedman’s Concise Medical Dictionary for the Health Professionals and Nursing (6th Ed), Lippincott, Williams & Wilkins, Baltimore, USA

Online Resources
Blackboard (Bb) - This will provide you with module guidelines and resources for the unit, including announcements.
Assessment

Assessment Schedule

<table>
<thead>
<tr>
<th>Task</th>
<th>Value (%)</th>
<th>Date Due</th>
<th>Unit Learning Outcome(s) assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONNECT eQuizzes</td>
<td>0</td>
<td>Ongoing</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>1. E-Tests - 3 (10% each)</td>
<td>30</td>
<td>Weeks 4, 8, 11</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>2. Prelab mark</td>
<td>6</td>
<td>Weekly</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>3. Tutorial Portfolio - 3 (8% each)</td>
<td>24</td>
<td>Weekly</td>
<td>1, 2, 3, 4, 5</td>
</tr>
<tr>
<td>4. Exam</td>
<td>40</td>
<td>Exam period</td>
<td>1, 2, 3, 4, 5</td>
</tr>
</tbody>
</table>

Detailed Information on Assessment Tasks

1. Three multichoice E-tests, each worth 10%.

<table>
<thead>
<tr>
<th>Test</th>
<th>Modules</th>
<th>Start date</th>
<th>Completion date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1, 2, 3</td>
<td>6/8/12</td>
<td>10/8/12</td>
</tr>
<tr>
<td>2</td>
<td>4, 5, 6</td>
<td>4/9/12</td>
<td>7/9/12</td>
</tr>
<tr>
<td>3</td>
<td>7, 8, 9</td>
<td>26/9/12</td>
<td>28/9/12</td>
</tr>
</tbody>
</table>

These assessments will be conducted through the “Assessment Centre” located in the Library (105:510). They will consist of 30 multi-choice questions and each test is worth 10% of your final assessment. When you go to do the test please bring your ID card. You will have 40 minutes to complete the test. This is a CLOSED BOOK assessment. **You must make your bookings to sit all three tests during week 1.**

Please be advised that the Assessment Centre booking system gives students the flexibility to book a test at a time that is suitable. This does not guarantee that your preferred time will be available. It is your responsibility to make a booking and to ensure that you have completed the test within the specified availability period. You must secure a booking PRIOR to the first date that the test is available. You are strongly advised to make your bookings early in the semester and to make a booking for each of the tests listed for this unit. Once you have made your booking be sure to record the date and time in your diary. We encourage students to be early, however if you arrive more than 10 minutes before your scheduled time you may be asked to wait.

*If you have NOT completed a test by the deadline, you will FORFEIT the mark*

To make your bookings click on the link in the My Studies tab in OASIS. If you do not plan to use one of your bookings please delete the booking so that it can be made available to another student. Bookings can be changed or deleted online up to 10 minutes before the start time. If you do not attend at the scheduled time your booking will be blocked and you will not be able to make another booking until the block has been removed by the Assessment Centre Team.

The Assessment Centre is open from 8:00 am to 6:00 pm (last test time 5:00 pm) Monday to Friday. Their contact number is 9266 7438
2. **Assessment of the Tutorial Portfolio - 24%**

   Attendance at tutorials is compulsory. Each week you will be required to complete a Tutorial Sheet composed of a series of questions on the weekly topic. These may include:
   a. tutorial preparation questions
   b. practical-based questions
   c. AND in-class tutorial questions.

   Every week, at the end of the tutorial, the tutor will collect each student’s Tutorial Sheet. Students must be present in person in order to submit these sheets. They CANNOT be handed in by another student, on your behalf. A number of students will be randomly selected from the class list to have their work marked each week. By the end of semester each student will have three Tutorial Sheets marked for assessment. You must submit your tutorial answers in INK and assessment will be based on presentation, understanding of content and participation. Any additional notes made during the tutorial MUST be distinguishable by colour from your original answers.

   If your work is selected for marking in a particular week and you are absent and are not covered by a medical certificate or equivalent, you will receive ZERO for that submission. **This medical certificate or equivalent MUST be submitted to your tutor by NO LATER than the following tutorial class (7 days). N.B. Pharmacy Medical certificates are not acceptable.**

3. **Prelab and Practical classes - 6%**

   Attendance at laboratory classes is compulsory. There is a Pre-lab that must be completed before attending each class and submitted in person to your tutor; this is preparation for your practical experience. By actively finding the information and completing the pre-lab answers you add to the knowledge gained at the lecture and you will get far more out of the practical class.

   If you miss your laboratory class, a medical certificate or equivalent MUST be submitted to your tutor by NO LATER than the following laboratory class (7 days).

   **If you are unable to attend your designated tutorial or practical class you should contact Rayne Stradwick (TSO) and arrange to attend an alternative class.**

4. **End of Semester Exam - 40%**

   The final exam will include questions based on all lectures tutorials and practicals. You are required to attempt the final examination in order to pass this unit.

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**Fair assessment through moderation**

Moderation describes a quality assurance process to ensure that assessments are appropriate to the learning outcomes, and that student work is consistently evaluated by assessors. Minimum standards for the moderation of assessment are described in the Assessment Manual, available from [policies.curtin.edu.au/policies/teachingandlearning.cfm](policies.curtin.edu.au/policies/teachingandlearning.cfm)
Pass requirements

Students are expected to complete all forms of assessment and **MUST** attempt the final exam. Students must achieve an overall grade of 50% or greater to pass the unit.

**Students are required to attend a minimum of 75% of the tutorials AND 75% of practical classes in order to be eligible to pass the unit. Failure to meet this requirement may result in a F-IN grade (in spite of a mark of 50 or above) and a possible Supplementary Assessment.**

Where there are extenuating circumstances, students must provide supporting evidence for their absence. For example:

- Compassionate grounds (certificate from an appropriate Curtin counsellor, minister of religion, medical practitioner or other appropriately qualified person).
- Medical grounds (certificate from a medical practitioner; pharmacy certificates not acceptable).
- Psychological grounds (certificate from a registered psychologist/psychiatrist).
- Other grounds of significance not listed

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**Plagiarism**

Plagiarism occurs when work or property of another person is presented as one's own, without appropriate acknowledgement or referencing. Plagiarism is a serious offence. For more information refer to [academicintegrity.curtin.edu.au](http://academicintegrity.curtin.edu.au)

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**Additional information**

**Enrolment:**

It is your responsibility to ensure that your enrolment is correct - you can check your enrolment through the eStudent option on OASIS, where you can also print any Enrolment Advice.

**Class Registration:**

You must be registered into a lab and Tutorial class in order to be able to attend them.

Online class registration will close on **Friday the 13th July.** If you have not registered in a lab or tutorial before this date please contact Rayne Stradwick, and she will manually register you into a class.

**Supplementary Exam:**

Supplementary examinations are awarded only at the discretion of the Board of Examiners. The aim of a supplementary examination is to allow the students to correct minor problems/deficiencies in the initial assessment and not gain extra study time or correct major problems. Students **must pass this exam** in order to pass the unit.

NB: Supplementary exams are NOT automatically awarded. The Board of Examiners will carefully review individual cases. No application by a student for supplementary examination will be considered.

**Deferred Assessments:**
Students may be permitted by the relevant Board of Examiners to defer the final examination where serious circumstances outside their control have arisen. However, a student's overall performance, and the validity of the documentary evidence provided, will be taken into account in granting permission for such deferral. It is not an automatic process. DEFERRED EXAMINATIONS for this unit will be held at the same time and venue as supplementary examinations.

Applications for examination deferral 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). Medical or other appropriate certificates and documentation should be attached to the application. Please be aware that the unit co-ordinator may take steps to check the validity of medical certificates and other documents.

Supplementary and deferred examinations granted by the Faculty of Health Sciences will be held in the week beginning Monday 19th November. Notification to students will be made after the School Board of Examiners meeting (week beginning Monday 12th November), via the Official Communications Channel (OCC) in OASIS. It is the student’s responsibility to check their OASIS account for official Curtin correspondence ON A WEEKLY BASIS.

Student Rights and Responsibilities

It is the responsibility of every student to be aware of all relevant legislation and policies and procedures relating to his or her 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.

Recent unit changes

We welcome feedback as one way to keep improving this unit. Students are encouraged to give unit feedback through eVALUate, Curtin’s online student feedback system (see http://evaluate.curtin.edu.au/info/index.cfm).
## ISAP 100, SEMESTER 2, 2012

**LECTURE, LABORATORY (PRACTICAL) & TUTORIAL PROGRAMME**

Lab (Practical) classes will be held in either Building 404.115/102/104 or 405.226/227/228

Students must check ISAP 100 - Blackboard site for the location of their lab classes before proceeding to class.

**Dress Requirements:** Closed shoes (heel & toe) must be worn in all laboratories.

Laboratory coats are mandatory in the anatomy facility.

<table>
<thead>
<tr>
<th>Wk</th>
<th>Begin Date</th>
<th>Lecture (Thursday 5-6pm, 210.101 Elizabeth Jolley LT)</th>
<th>MODULE</th>
<th>Lab Group A</th>
<th>Lab Group B</th>
<th>Tutorial</th>
<th>Test Due</th>
</tr>
</thead>
</table>
| OW| 9 July | **Module 1 Lecture**  
How are body functions controlled? (GW) | NONE | NONE | NONE | NONE | |
| 1. | 16 July | **Module 2 Lecture**  
How is cardiac function controlled? (DD) | 1 | CNS & Endocrine | Reflexes | Neuroendocrine control | |
| 2. | 23 July | **Module 3 Lecture**  
How is blood circulation regulated? (DD) | 2 | Cardiovascular Anatomy | Cardiovascular Anatomy | Cardiac function. | |
| 3. | 30 July | **Module 4 Lecture**  
How do the kidneys regulate body fluid volume & composition? (PKB) | 3 | Cardiovascular Physiology | Cardiovascular Physiology | Disturbances in BP | |
| 4. | 6 Aug | **Module 5 Lecture**  
Moving air in & out of the lungs and factors affecting gas exchange. (PKB) | 4 | Urinary Anatomy & Physiology | Urinary Anatomy & Physiology | Aspects of renal function | Test 1 |
| 5. | 13 Aug | **Module 6 Lecture**  
Blood gas transport and the control of respiration (PKB) | 5 | Respiratory Anatomy | Respiratory Anatomy | Breathing and gas exchange. | |
| 6. | 20 Aug | **Module 7 Lecture**  
From the plate to the bowl - a Cook’s tour? (JT) | 6 | Respiratory Physiology | Respiratory Physiology | Aspects of gas transport.. | |
| 7. | 27 Aug | **TUITION FREE WEEK** | | | | | |
| 8. | 3 Sept | **Module 8 Lecture**  
Break it down & suck it up? (JT) | 7 | Digestive Anatomy | Digestive Anatomy | GIT responses | Test 2 |
| 9. | 10 Sept | **Module 9 Lecture**  
How is the body supported? (JC) | 8 | Digestive Physiology | Digestive Physiology | Topics in digestion and absorption | |
| 10. | 17 Sept | **Module 10 Lecture**  
How do we move? (GW) | 9 | The Skeleton | The Skeleton | Bone Homeostasis | |
| 11. | 24 Sept | **Module 11 Lecture**  
Male reproductive system (GW) | 10 | Muscular system  
Somatic control | Muscles, system  
Somatic control | Musculoskeletal function | Test 3 |
| 12. | 1 Oct | **Module 12 Lecture**  
Female reproductive system (JT) | 11 | Reproductive male | Reproductive male | Male reproductive control | |
| 13. | 8 Oct | NONE | 12 | Reproductive female | Reproductive female | Female reproductive control | |
| 14. | 15 Oct | | | | | **STUDY WEEK** | |
| 15. | 22 Oct | | | | | **EXAM WEEK 1** | |
| 16. | 29 Oct | | | | | **EXAM WEEK 2** | |
Lecturers

Mr Gary Whittaker (GW)                Ms Jassie Tunstill (JT)                Dr Phil Bourne (PKB)
Dr Julianne Crowley (JC)              Dr Danielle Dye (DD)