Department of Human Biology
School of Biomedical Sciences
Faculty of Health Sciences
biomed.curtin.edu.au

Human Biology 134

Semester Two, 2009

Unit study package number:	1644 (v.7)
Mode of study	Internal
Tuition pattern summary:	Lecture: 1 X 2 Hours Weekly Practical: 1 x 2 Hours Weekly Independent essential online learning: 1 x 1 Hour Weekly
Credit value	25
Pre-requisite Units	1643 v.7 Human Biology 133 or any previous version OR 303149 v.2 Human Biology 131 or any previous version **AND** 9930 Anatomy 151 v.5 or any previous version OR 6933 Human Biology 135 AND 12931 Pharmaceutical Biology 120 **AND** 8645 Pharmaceutical Biology 121
Anti-requisite (s):	6934 (v.4) Human Biology 136 or any previous version AND 303034 (v.2) Human Biology 132 or any previous version
Core Unit Status:	SIGNIFICANT: Fail this unit TWICE and it may lead to the termination of your course.
Result type:	Grade and Mark
Approved incidental fees:	Anatomy permit

Unit Co-ordinator:	Name:	Dr Marilyn BENNET-CHAMBERS
	Phone:	9266 3358
	Email:	M.Bennet-Chambers@curtin.edu.au
	Building : Room	(08) 9266 3358
	Consultation times:	Any time door is open.
Tutor:	Name:	
	Email:	
	Group:	
Administrative contact:	Name:	Mrs Helen Tonkin
	Phone:	(08) 9266 7374
	Email:	H.Tonkin@curtin.edu.au
	Building : Room	Biomedical Sciences Building 308.122

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

CAA completion dates (Final; No extensions)	E1: 18/8/09	E2: 8/9/09	E3: 22/9/09	E4: 13/10/09	E5: 30/10/09

Syllabus

Structure and function of the human body with emphasis on the physiology of the cardiovascular, immune, respiratory, endocrine, digestive, urinary and reproductive systems.

Introduction

This second unit you are undertaking in Human Biology builds on the knowledge you have acquired so far, then examines how different systems in the body function. The overall purpose of these systems is to maintain homeostasis within the body. You will examine the cells & tissues (histology) that make up the organs (anatomy) that work together in various organ systems and then see how they function (physiology).

This unit requires that you be active in your learning. This can take several forms:

- Writing notes in lectures, and NOT relying on downloading the lecturers' notes only.
- Taking notes while reading the text
- Answering the focus questions in the workbook
- Attending tutorials and practicals and taking an active role in these activities

Expect to be challenged. We have set the unit up to encourage active learning and develop self-directed study. While you will be provided with all the information you need, it will not be just handed to you, and you will not always be reminded of your obligations to yourself and others. You will be encouraged to be self-disciplined and to problem-solve, and you will see that, in science, there is not always a right answer or method. You will need to consider the views and beliefs of others as well as your own. You'll need to be honest with yourself about the quality of your work because you're the one who will benefit from effective study practices.

Unit Learning Outcomes

Upon successful completion of this unit you will be able to:

1. Describe and explain human structure to function so as to promote an appreciation of the normal processes of life.
2. Demonstrate an integrated knowledge of the anatomy and physiology of the human body.
3. Explain the structure to function relationships of the endocrine, blood, cardiovascular, lymphatic, immune, respiratory, digestive, urinary and reproductive systems.

Learning Activities

Learning is an active process and is enhanced by approaching knowledge in different ways and from various angles, each time building on the knowledge acquired previously. To this end the content covered in HB134, is presented in various formats, and more than once, which assists the learning process, regardless of your own learning style; visual, auditory or tactile. There are TEN modules and each module has the material to be covered presented in different ways; Lecture, pre-labs, practical/tutorial sessions, essential online learning (EOLs) and then answering the focus questions (FQ's) at the end of each module in your OWN words. Each presents the material in a different manner and each time you revisit the knowledge it will build on the knowledge you have already retained, i.e. adding a layer of knowledge each time you approach the module from a different learning perspective.

Lectures

Listening to a lecture, looking at the visual images that accompany the material presented by the lecturer, is often your FIRST exposure to the material to be covered. Lecture note summaries are made available on the Human Biology 134 FLECS-Blackboard site, however learning is assisted by actively making your own notes as you listen. Consequently you will have a record, in your OWN style, of the material covered. You will also have a record of the **additional** material and explanations that are not in the notes and are given during the lecture (see lecture program p.7 this document).

Practical/Tutorial Sessions
There is a Pre-lab associated with each session. This is preparation for your practical/tutorial sessions and your SECOND exposure to the HB134 content. 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/tutorial session.

The practical sessions rely on visual material, and hands-on activities, to present the HB134 content in your THIRD contact with the material. The tutorials are an interactive sessions with a tutor, that give a different perspective of the module content. There are 10 sessions, each of 2 hours duration, and attendance is compulsory. There are 10 sessions, 5 consist of a 1-hour practical and a 1-hour tutorial while the other five are 2-hour practicals (see program p.8 this document).

The class in each timeslot is divided into two groups - Group A and Group B. You will be assigned to one of these groups in your first practical and you must remain in your allocated group for the duration of the semester. Your group determines what you do in each hour of a 2-hour session. As a general rule, if there is a practical and a tutorial, Group A will do their practical in the first hour while Group B will have the tutorial first. This is detailed in the Practical/Tutorial schedule.

Students are reminded that **attendance at practical and tutorial classes is compulsory**. Absenteeism due to medical reasons must be supported with a detailed, valid medical certificate. Absenteeism for any other reason will only be granted in exceptional circumstances, with prior communication. Students who absent themselves from practical classes without valid medical certificates may find their evaluation marks for continuous assessment are adjusted *pro rata*.

Please note that the material presented in the practical/tutorial sessions contributes a **significant** proportion of the information provided in this unit and is examinable.

Essential Online Learning (EOL)
Additional information in this unit is provided online each week in FLECS-Blackboard and is to be completed in the student's own study time. This component is known as Essential Online Learning or EOL and is your THIRD exposure to the content within a particular Module. Students must download and complete the EOL associated with each weeks lecture topic. This work is essential to the unit and is EXAMINABLE.

Focus Questions
The FQ's are intended for independent, structured learning to aid students with background information and general understanding of the course material. Most of the information needed to complete the focus questions can be obtained from the current textbook, lecture notes and essential on-line learning (EOLs) but students are encouraged to explore additional sources especially those on-line resources that are available with your textbook. This will be the FOURTH approach to the material covered in a module and these FQ's set the parameters of what you need to know and understand to successfully attempt the assessments associated with this unit.

Learning Resources

Essential Texts

You will need to purchase the following textbook in order to complete this unit:

1. **Marieb, EN and Hoehn, K (2007)**. Human Anatomy & Physiology, 7th edition, Benjamin Cummings (available from University Bookshop)
   (OR access to online version available for duration of HB133 and HB134)

   OR

   Tortora, GJ and Derrickson, B (2009). Principles of Anatomy and Physiology, 12th edition, John Wiley and Sons (available from University Bookshop)
   (OR access to online version available for duration of HB133 and HB134)

Human Biology Workbook

You should purchase the following textbook in order to complete this unit:

1. Human Biology 134 Workbook 2009, Curtin University (available from Department of Human Biology)

Copies will also be available for photocopying purposes in the closed reserve section of the library.

Recommended Texts

You do not have to purchase the following textbooks but you may like to refer to them.

1. **Dirckz**, J (ed) (2005) Stedman's Concise Medical Dictionary for the Health Professionals and Nursing, 5th edition, Lippincott, Williams & Wilkins, Baltimore, USA (available from University Bookshop)

2. **Eroschenko, VP** (2005). *diFiore's Atlas of Human Histology with Functional Correlations* (10th Ed.) Baltimore : Lippincott, Williams & Wilkins

3. **Martini, FH** (2008). *Fundamentals of Anatomy and Physiology* (8th. Ed.): New York: Benjamin- Cummings Publishing Co.

4. **Rhoades, R. and Pflanzer, R** (1996). *Human Physiology*. (3rd Ed) Philadelphia, USA: Saunders College Publishing,

5. **Saladin KS** (2004). *Anatomy and Physiology: the unity of form and function. (3rd Ed)* Sydney Aust.: McGraw Hill

6. **Sherwood, L** (2004). *Human Physiology from Cells to Systems* (5th Ed.) Pacific Grove Ca: Brooks/Cole

7. **Young B, Lowe, JS, Stevens, A & Heath JW** (2006). *Wheater's Functional Histology: A Text and Colour Atlas* (5th Ed). Edinburgh: Churchill Livingstone

Online Resources

1. **GetReady Website –** The Department of Human Biology has a website with all the information that you will need to begin your practical sessions:

   http://www.biomed.curtin.edu.au/humanbiology/setgo/setgo.html

1. **FLECS-Blackboard –**This will provide you with Module guidelines for all practical questions and other helpful resources for the unit, including announcements regarding the unit, HB134. The guidelines will only be made available after all students have completed a particular practical. This material will only be accessible to students enrolled in the unit.

   (http://lms.curtin.edu.au)

Assessment Schedule

Task		Value (%)	Date due	Unit Learning Outcome(s) assessed
E1	Endocrine	8%	18/08/09	One and Three
E2	Blood, lymphatic & Immune	8%	8/09/09	One and Three
E3	Cardiovascular	8%	22/09/09	One and Three
E4	Respiratory	8%	13/10/09	One and Three
E5	Digestive	8%	30/10/09	One and Three
Pre-labs		5%	Each week	Three
Practical Exam		15%	Exam fortnight	One, Two and Three
Theory Exam		40%	Exam fortnight	One, Two and Three

Detailed information on assessment tasks

1. E tests (40%)

There are FIVE closed-book, computer-based multi-choice tests. Each consist of 25 multiple-choice questions. They MUST be completed by the deadline dates as shown above and you have **ONE** attempt at any E tests.

You will access the CAA (Computer Assisted Assessment) based E tests on Curtin campus. E tests will be held in the **CAA lab** on the **5th floor** of the **Curtin library**. Students log into Blackboard FLECS and access the ***CAA Lab Online Booking System***. Bookings can be made from week one of semester. If you make a booking and find you cannot sit the test at that time you must **DELETE the old booking before you can make another booking** to sit the test. Bookings are best done in week view. If all else fails you can ring the CAA lab on 9266 7438 and the staff can talk you through the process. Opening hours will be published on the CAA lab website (http://is.curtin.edu.au/eot/caa) and displayed on the door of the CAA lab prior to the start of semester.

If you have not completed a test by the deadline you will forfeit the mark. Do not leave your tests to the last minute.

2. Pre-Labs (5%)

These are associated with each practical/tutorial session and revisit knowledge covered in lecture, introduce any new material including terminology, required for the successful completion of a practical/tutorial class. It is essential that they be completed each week and bought to class and submitted **in person**. Tutors will check these at the BEGINNING of each class and will accordingly allocated a proportion of the mark. Conscientious students would expect to gain the entire 5%.

3. Final Theory Examination (40%)

This is a 2-hour exam conducted during the examination period in November. It comprises of a series of **short answer** questions only, similar in style to the Study Questions found at the end of every Module.

4. Practical Examination (15%)

This exam will also be held during the formal examination period and students will be required to place their name on a booking sheet against a designated time, and have a current **anatomy**

permit, in order to undertake the exam. Booking sheets will not be made available until the last week of the teaching semester.

Pass Requirements

Both the final practical and theory exams must be attempted in order to complete this unit. To pass this unit an overall mark of 50% or greater for the combined total assessment must be achieved and a minimum of 50% should be achieved in the final THEORY exam. Please note that students attending **less than 80%** of the scheduled practical/tutorial sessions may be **excluded** from the final examinations.

Supplementary information

Enrolment and HECS:

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 an Enrolment Advice.

Supplementary/Deferred Exams:

Supplementary and deferred examinations granted by the School of Biomedical Science will be held in the week beginning **7th December, 2009**. Notification to students will be made after the your Schools' Board of Examiners meeting 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. If your results show that you have been awarded a supplementary or deferred exam you should immediately check your OASIS email for details.

Please note the following:

1. Your final results are NOT available until after your school's Board of Examiners meeting. This is held in the SECOND week AFTER the examination period. You CANNOT obtain your marks by calling your tutor or the unit coordinator, but must wait until the examinations office in central administration releases them in the week following the board meeting. These are published on the Curtin University website. Please do not contact us asking for your marks.

2. SUPPLEMENTARY and DEFERRED examinations are awarded only at the discretion of the Board of Examiners. It is your responsibility to be available at this time should a supplementary/deferred exam be awarded. **No other time** will be arranged.

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

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,
- students' responsibility to check enrolment,
- deadlines, appeals, and grievance resolution,
- student feedback,
- other policies and procedures
- electronic communication with students

See students.curtin.edu.au/rights for comprehensive information on all of the above.

Academic problems

Students experiencing difficulties with the academic content of this unit should see their tutor or the lecturer responsible for the subject matter presenting problems or the **Unit Coordinator, Dr M Bennet-Chambers,** whose details appear on the front page of this unit outline.

Internet/FLECS-Blackboard access problems

Any problems associated with internet/FLECS-Blackboard access should be addressed to **Randy Strack** at: R.Strack@curtin.edu.au

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). Recent changes to this unit include:

1. Inclusion of Study Questions at the end of each module in the style of the theory exam questions, which has lead to an improvement in the student answers in the short-answer part of the exam.
2. The final theory exam is now all short-answer.
3. Review of E-test questions in the CAA lab.

HUMAN BIOLOGY 134

LECTURE PROGRAMME, SEMESTER 2, 2009

Monday 12-2pm, 201.101 (Elizabeth Jolly LT) OR
Wednesday 4-6pm, 201.102 (Norm Duffy LT)

Week	Week Beginning	Hour	Lecture	Lecturer
'O'	**20 -24 Jul**		Orientation	PKB
1	**27 Jul**	2hr	Endocrine 1	MG
2	**3 Aug**	1st 2nd	Endocrine 2 Blood	MG PKB
3	**10 Aug**	2hr	Lymphatics Immune System	BB
4	**17 Aug**	2hr	Cardiovascular (CVS) Anatomy and Physiology 1	MG
5	**24 Aug**	Study Week		
6	**31 Aug**	2hr	Cardiovascular (CVS) Anatomy and Physiology 2	MG
7	**7 Sept**	2hr	Respiratory Anatomy and Physiology 2	PKB
8	**14 Sept**	2hr	Respiratory Anatomy and Physiology 2	PKB
9	**21 Sept**	2hr	Digestive Anatomy and Physiology 1	JT
10	**28 Sept**	Study Week		
11	**5 Oct**	2hr	Digestive Anatomy and Physiology 2	JT
12	**12 Oct**	2hr	Urinary Anatomy and Physiology	PKB
13	**19 Oct**	2hr	Reproductive Anatomy and Physiology 1	SM
14	**26 Oct**	2hr	Reproductive Anatomy and Physiology 2	SM
15	**2 Nov**	STUDY WEEK		
16	**9 - 13 Nov**	EXAMINATIONS		
17	**16 - 20 Nov**			

Lecturers	**Email**
Dr Michaele Gardiner (MG)	m.gardiner@curtin.edu.au
Dr Brian Brestovac (BB)	b.brestovac@curtin.edu.au
Dr Phil Bourne (PKB)	p.bourne@curtin.edu.au
Ms Jassie Tunstill (JT)	j.tunstill@curtin.edu.au
Simon Mahoney (SM)	s.mahoney@curtin.edu.au

HUMAN BIOLOGY 134

PRACTICAL PROGRAMME, SEMESTER 2, 2009

Practical/tutorial classes will be held in either Buildings 404.115/102/104 or 405.227/228. Students must check either the HB134 FLECS-Blackboard site for the location of their practical site OR the noticeboard in the foyer on the ground floor of Building 404 for locations each week before proceeding to class. Dress Requirements: Closed shoes (heel & toe) must be worn in all laboratories & laboratory coats are mandatory in the anatomy facility. Tutorials are marked in **BOLD.**

Week	Week Beginning	Hour	GROUP A	GROUP B
1	**27 Jul**	1 2	No Practical this week	No Practical this week
2	**3 Aug**	1 2	Endocrines **Hormones & Metabolism**	**Hormones & Metabolism** Endocrines
3	**10 Aug**	1 2	Blood **Blood parameters**	**Blood parameters** Blood
4	**17 Aug**	1 2	Lymphatics **Disease Resistance**	**Disease Resistance** Lymphatics
5	**24 Aug**	Study Week		
6	**31 Aug**	1 2	Cardiovascular Structure	Cardiovascular Physiology
7	**7 Sept**	1 2	Cardiovascular Physiology	Cardiovascular Structure
8	**14 Sept**	1 2	Respiratory Structure	Respiratory Physiology **Blood Gases**
9	**21 Sept**	1 2	Respiratory Physiology **Blood Gases**	Respiratory Structure
10	**28 Sept**	Study Week		
11	**5 Oct**	1 2	Digestive System	NO PRACTICAL
12	**12 Oct**	1 2	NO PRACTICAL	Digestive System
13	**19 Oct**	1 2	Urinary Structure **Renal Physiology**	**Renal Physiology** Urinary Structure
14	**26 Oct**	1 2	Reproductive System	Reproductive System
15	**2 Nov**	STUDY WEEK		
16	**9 - 13 Nov**	EXAMINATIONS		
17	**16 - 20 Nov**			

HB134 Learning Calendar for Semester 2, 2009

Wk	Monday	Tuesday	Wednesday	Thursday	Friday
1	27 Jul HB134 Lecture 12-2pm; 210.101	28 Jul	29 Jul HB134 Lecture 4-6pm; 210.102	30 Jul	31 Jul
2	3 Aug HB134 Lecture 12-2pm; 210.101	4 Aug	5 Aug HB134 Lecture 4-6pm; 210.102	6 Aug	7 Aug
3	10 Aug HB134 Lecture 12-2pm; 210.101	11 Aug	12 Aug HB134 Lecture 4-6pm; 210.102	13 Aug	14 Aug
4	17 Aug HB134 Lecture 12-2pm; 210.101	18 Aug E1 deadline	19 Aug HB134 Lecture 4-6pm; 210.102	20 Aug	21 Aug
5	23 Aug STUDY WEEK	24 Aug STUDY WEEK	25 Aug STUDY WEEK	26 Aug STUDY WEEK	27 Aug STUDY WEEK
6	31 Aug HB134 Lecture 12-2pm; 210.101	1 Sept	2 Sept HB134 Lecture 4-6pm; 210.102	3 Sept	4 Sept
7	7 Sept HB134 Lecture 12-2pm; 210.101	8 Sept E2 deadline	9 Sept HB134 Lecture 4-6pm; 210.102	10 Sept	11 Sept
8	14 Sept HB134 Lecture 12-2pm; 210.101	15 Sept	16 Sept HB134 Lecture 4-6pm; 210.102	17 Sept	18 Sept
9	21 Sept HB134 Lecture 12-2pm; 210.101	22 Sept E3 deadline	23 Sept HB134 Lecture 4-6pm; 210.102	24 Sept	25 Sept
10	28 Sept STUDY WEEK	29 Sept STUDY WEEK	30 Sept STUDY WEEK	1 Oct STUDY WEEK	2 Oct STUDY WEEK
11	5 Oct HB134 Lecture 12-2pm; 210.101	6 Oct	7 Oct HB134 Lecture 4-6pm; 210.102	8 Oct	9 Oct
12	12 Oct HB134 Lecture 12-2pm; 210.101	13 Oct E4 deadline	14 Oct HB134 Lecture 4-6pm; 210.102	15 Oct	16 Oct
13	19 Oct HB134 Lecture 12-2pm; 210.101	20 Oct	21 Oct HB134 Lecture 4-6pm; 210.102	22 Oct	23 Oct
14	26 Oct HB134 Lecture 12-2pm; 210.101	27 Oct	28 Oct HB134 Lecture 4-6pm; 210.102	29 Oct	30 Oct E5 deadline
15	2 Nov STUDY WEEK	3 Nov STUDY WEEK	4 Nov STUDY WEEK	5 Nov STUDY WEEK	6 Nov STUDY WEEK
16	9 Nov EXAMINATIONS	10 Nov EXAMINATIONS	11 Nov EXAMINATIONS	12 Nov EXAMINATIONS	13 Nov EXAMINATIONS
17	16 Nov EXAMINATIONS	17 Nov EXAMINATIONS	18 Nov EXAMINATIONS	19 Nov EXAMINATIONS	20 Nov EXAMINATIONS