



FACULTY OF MEDICINE
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF PHYSIOLOGY

NEUROPHYSIOLOGY

NEUR3221

SESSION 2, 2012

COURSE OUTLINE AND PRACTICAL CLASS MANUAL

CONTENTS

Page

Course staff	3
Course information	4
Assessment	7
Academic honesty and plagiarism.....	8
Resources for students	9
Continual course improvement.....	10
Administrative Information.....	10
Exam format.....	11
Practical report guidelines	12
Article report guidelines	13
In class assignment & online quizzes.....	14
Course timetable	15
Practical classes	
P1: Psychophysics of Tactile Sensation.....	16
P2: Kinaesthesia	26
P3: Sensory and Motor Nerve Recording	30
P4: Visual & Auditory Psychophysics.....	40
P5: DIY practical	57

COURSE STAFF

Course Coordinators

Course Coordinator A/Prof Paul Bertrand
 room 301, third floor Wallace Wurth building
 phone 9385 3947
 e-mail Paul.Bertrand@unsw.edu.au

Course Examiner Dr Richard Vickery
 room 308D, third floor Wallace Wurth building
 phone 9385 1676
 e-mail Richard.Vickery@unsw.edu.au

Consultations

A/Prof Bertrand is responsible for all academic and administrative matters regarding the course. Students should feel free to approach him with any questions or problem concerning the course either before or after scheduled class activities. Outside of these times, students are strongly encouraged to arrange an appointment in advance by email. In A/Prof Bertrand's absence, enquiries can be directed to Dr Vickery who is usually in on Monday, Wednesday and Friday.

Other information of an administrative nature may also be obtained from the combined Student Office for SOMS, BABS, BEES (Room G27, Biosciences Building). This is also where reports are turned in.

Other Teaching Staff

Dr Amanda Craig	a.craig@unsw.edu.au
Prof Gary Housley	g.housley@unsw.edu.au
Dr Arun Krishnan	arun.krishnan@unsw.edu.au
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Dr Janet Taylor	j.taylor@neura.edu.au

COURSE INFORMATION

Course Structure and Teaching Strategies

Units of credit: This course is worth 6 units of credit.

Contact hours: The course structure is:

- Three x 1 hour lectures (or tutorials) per week.
- One x 3 hour practical classes (or tutorial) per week.

Practical Class assignment:

Students are enrolled in a single practical class.

Class Times and Locations:

The course runs on Monday, Tuesday and Wednesday.

Lectures run for 1 hour will be held at: 11 am on Monday in the Matthews D theatre, 5 pm on Tuesday in the Biomed E theatre and 9 am on Wednesday in the BioMed E theatre.

Practical classes are run from 3-6 pm on Monday in room 329 on the third floor of the **Biological Sciences** building.

Course schedule

The course timetable is included at the end of this section (page 14). Any updates to the timetable will be announced in lectures and on Blackboard.

Blackboard

This course will rely extensively on Blackboard for communication and resources. To access the course site, point your browser to:

lms-blackboard.telt.unsw.edu.au

At the left enter your UNSW User ID (z<student-number> and your zPass). After logging on to Blackboard, look for the course NEUR3221 on the right. You should have access to it if you are properly enrolled.

On Blackboard you will be able to access lecture notes, posted shortly before each lecture, as well as iLecture recordings of the lecture (posted after the lecture). Students are strongly encouraged to attend the lectures in person instead of relying on notes and recordings.

Blackboard forums are also available for students to discuss the course with each other and with the lecturers and tutors. In particular, specific forums allow lecturers to answer questions about the lecture material. There is also a forum in which students can provide anonymous feedback on the course while the course is being conducted. Please use the forum wisely - abusive or offensive posts will be removed and will result in the forum being shut down.

Requirements for Practical Classes

Practicals involving the use of animal specimens are a privilege, and must be treated with respect and professionalism. Students are expected to adhere to NH&MRC guidelines for ethics in animal studies (available at the course site, or via www.nhmrc.gov.au/publications/synopses/_files/ea16.pdf).

Students must take due care with biological and hazardous material and make sure all equipment is left clean and functional. Those unwilling to follow these basic laboratory rules will be marked absent. Enclosed shoes are compulsory in all practical classes. Punctual arrival is expected, and mobile phones must be switched off before entering the class. Practical classes involving your participation as a subject may require you to sign a witnessed, informed consent form.

Attendance Requirements

Attendance at practical classes is compulsory. Satisfactory completion of the work set for each class is essential. It should be noted that non-attendance for other than documented medical or other serious reasons, or unsatisfactory performance, for more than 1 practical class during the session may result in an additional practical assessment exam or ineligibility to pass the course.

Medical Certificates

Students who miss practical classes or exams due to illness or for other reasons must submit a copy of medical certificates or other acceptable documentation to the course co-ordinator. **Certificates should be lodged no more than 7 days after an absence.** Certificates lodged after 7 days will not be accepted. The following details must be attached: Name, Subject number, Date of the class, Name of class missed.

Official Communication by Email

All students in the course NEUR3221 are advised that e-mail is now the official means by which the School of Medical Sciences at UNSW will communicate with you. All e-mail messages will be sent to your official UNSW e-mail address (e.g. z1234567@student.unsw.edu.au) and, if you do not wish to use the University e-mail system, you **MUST** arrange for your official mail to be forwarded to your chosen address. The University recommends that you check your mail at least every other day. Facilities for checking e-mail are available in the School of Medical Sciences and in the University library. Further information and assistance is available from the Service Counter on 9385 1777. Free e-mail courses are run by the UNSW Library (Level 2).

Approach to Learning and Teaching

The philosophy underpinning this course and its Teaching and Learning Strategies is based on "Guidelines on Learning that Inform Teaching at UNSW". These guidelines may be viewed at: www.guidelinesonlearning.unsw.edu.au. The teaching of neurophysiology covers both the physiology of neurons and brain function, and how these data were derived, as a full understanding of neurophysiology requires an appreciation of both what is known and of the limitations imposed by our study tools.

Lectures will provide you with the concepts and theory essential for understanding neurophysiology. The practical classes will assist you in the development of research and analytical skills. The practical classes are relatively small and not too tightly structured, so they allow you to engage in more interactive learning than is possible in lectures. The tutorials will be run by someone in addition to the lecturer on the topic, providing you with the opportunity to obtain another perspective on the material under review.

Although the primary source of information for this course is the material delivered in lectures and practical classes, effective learning can be enhanced through self directed use of other resources such as textbooks. Your practical classes will be directly related to the lectures and it is essential to prepare for practical classes before attendance. It is up to you to ensure you perform well in each part of the course; preparing for classes; completing assignments; studying for exams and seeking assistance to clarify your understanding.

Aims of the Course

To gain an understanding of the principles of neurophysiology by:

- using molecular, synaptic and cellular processes to explain brain function
- grasping the relationship between experimental techniques and the data they produce

Student Learning Outcomes

UNSW Learning outcomes:

UNSW aims to provide an environment that fosters students achievement of the following generic graduate attributes:

1. the skills involved in scholarly enquiry
2. an in-depth engagement with the relevant disciplinary knowledge in its interdisciplinary context
3. the capacity for analytical and critical thinking and for creative problem-solving
4. the ability to engage in independent and reflective learning
5. information literacy the skills to appropriately locate, evaluate and use relevant information
6. the capacity for enterprise, initiative and creativity
7. an appreciation of, and respect for, diversity
8. a capacity to contribute to, and work within, the international community
9. the skills required for collaborative and multidisciplinary work
10. an appreciation of, and a responsiveness to, change
11. a respect for ethical practice and social responsibility
12. the skills of effective communication

Not every course addresses all these attributes evenly. Neurophysiology is weighted most heavily towards attributes 1-4; attributes 5, 9 and 12 are also specifically addressed.

Specific Learning outcomes:

By the end of this course students are expected to have gained:

- a demonstrable knowledge of the scope of neurophysiology, and detailed knowledge in some areas including somatosensory system, vision, and synaptic plasticity.
- experience in applying basic physical and physiological principles to resolve questions related to brain and behaviour.
- experience and expertise in critically examining a research paper in the field of Neurophysiology and succinctly presenting their synopsis to an audience of peers.
- experience and expertise in critical enquiry by contributing to scientific discussion.
- by practical experience and critical review, an appreciation of the relationship between the experimental techniques that provide neurophysiological data, and the constraints on interpretation that the techniques impose.

ASSESSMENT

Assessment tasks

Online quizzes	5%
In-class assessment (30 minute duration)	10%
Mid-session exam (50 minute duration)	15%
Article report on a research paper	15%
Practical report	15%
Final exam (2 hour duration)	40%

Material pertaining to the both the lectures and practical classes will be examined in both the mid-session and final exams.

The Article report and the Practical report must be submitted electronically as a .DOC or .PDF using Blackboard and on paper to the SOMS office. In the folder "Extra Stuff" will be a Turnitin submission box for each of these reports which will then process them via the Turnitin system. Please see the report guidelines on pages 11 and 12 of this manual.

Missed In-Course Assessment

If you unavoidably miss an assessment task in Neurophysiology, you must inform the Course Co-ordinator immediately. You must supply adequate documentation (such as a medical certificate) to be considered for any supplementary assessment.

Missed Exams

If in any circumstances you unavoidably miss an examination, you must inform the Registrar and also contact the Course Co-ordinator immediately. Normally, if you miss an exam (without medical reasons) you will be given an absent fail. If you arrive late for an exam no time extension will be granted. It is your responsibility to check timetables and ensure that you arrive with sufficient time.

PLEASE NOTE that if you miss any examinations for medical reasons you must lodge a medical certificate with New South Q within **3 DAYS** (refer to UNSW Student Gateway @ www.student.unsw.edu.au for further details). Your request for consideration will be assessed and a deferred exam **MAY** be granted. You cannot assume you will be granted supplementary assessment. The deferred exam may include a significant oral element.

Special Consideration

If you believe that your performance in a course, either during session or in an examination, has been adversely affected by sickness or for any other reason, you should notify NewSouth Q and ask for special consideration in the determination of your results. Such requests should be made as soon as practicable after the problem occurs. **Applications made more than three days after an examination in a course will only be considered in exceptional circumstances.** Please refer to myUNSW for further details regarding special consideration. Please note that an application for special consideration is no guarantee you will be able to make up an exam; each case is determined on its own merits.

ACADEMIC HONESTY AND PLAGIARISM

Students should be aware of UNSW's policy on academic and student misconduct: my.unsw.edu.au/student/academiclife/assessment/AcademicMisconductStudentMisconduct.html

Student assignments may be submitted to the Turnitin plagiarism detection engine. In addition students should be familiar with the following:

Plagiarism is the presentation of the thoughts or work of another as one's own. Examples include:*

- *direct duplication of the thoughts or work of another, including by copying work, or knowingly permitting it to be copied. This includes copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;*
- *paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;*
- *piecing together sections of the work of others into a new whole;*
- *presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and,*
- *claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†*

Submitting an assessment item that has already been submitted for academic credit elsewhere may also be considered plagiarism. The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does not amount to plagiarism.

Students are reminded of their Rights and Responsibilities in respect of plagiarism, as set out in the University Undergraduate and Postgraduate Handbooks, and are encouraged to seek advice from academic staff whenever necessary to ensure they avoid plagiarism in all its forms.

The Learning Centre website is the central University online resource for staff and student information on plagiarism and academic honesty. It can be located at: www.lc.unsw.edu.au/plagiarism

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:

- *correct referencing practices*
- *paraphrasing, summarising, essay writing, and time management*
- *appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts*

Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

* Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle

† Adapted with kind permission from the University of Melbourne.

RESOURCES FOR STUDENTS

Student Support Services

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course co-ordinator prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the EADU 9385 4734. Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

Student Rights and Responsibilities & Appeal Procedures

Refer to UNSW Student Gateway @ www.student.unsw.edu.au

Grievance Resolution Officer

In case you have any problems or grievance about the course, you should try to resolve it with the Course Organizer. If the grievance cannot be resolved in this way, you should contact the School of Medical Sciences Grievance Officer, Dr P. Pandey (9385 2483, P.Pandey@unsw.edu.au).

Textbook and Reading List

Required textbook:

Neuroscience: Exploring the Brain. 3rd edition, 2006
Bear, Connors & Paradiso
Williams & Wilkins

Recommended reading:

Principles of Neural Science
Kandel, Schwartz & Jessell
McGraw-Hill

Medical Physiology, a cellular and molecular approach.
Boron & Boulpaep
Saunders

Neuroscience.
Purves, Augustine, Fitzpatrick et al.
Sinaur

The books are available from the UNSW Bookshop, and limited copies are held by the UNSW library.

CONTINUAL COURSE IMPROVEMENT

Feedback from students about this course is one of the main ways of ensuring the continual development and improvement of this course. We invite students to provide online anonymous course evaluation to academic staff via Blackboard throughout the session to enable immediate feedback. The end-of-session Course and Teaching Evaluation and Improvement [CATEI] process of UNSW is another way in which student feedback is evaluated, and we ask for your assistance in completing this survey at the appropriate time. Part of the CATEI process is to communicate significant changes to the course to subsequent cohorts of students.

Changes to the course for this year based on feedback from 2011 include:

- More examples are not used to help describe the more basic neurophysiological concepts.
- Practicals have been reorganised to fill out the time more usefully.
- Most lecture slides now contain written information to explain and clarify the image content.
- There are more and clearer relations between lecture materials and practical materials.

ADMINISTRATIVE INFORMATION

General Information

The Department of Physiology is part of the School of Medical Sciences and is within the Faculty of Medicine. It is located on the lower ground, 2nd and 3rd floors of the Wallace Wurth building. General enquiries can be made at the School of Medical Sciences Reception, located on the Ground Floor of the Wallace Wurth building (office hours are 9.00 am - 5:00 pm).

Professor Gary Housley is Head of the Department of Physiology and appointments to see him may be made through his Administrative Assistant on 9385 2804.

There is are two honours programs available through the School of Medical Sciences. The School of Medical Sciences Honours program is coordinated by Dr Patsie Polly (ph: 9385 8765). In addition, the School of Medical Sciences and the School of Psychology jointly run the Neuroscience Honours program which is coordinated by Dr John Power <john.power@unsw.edu.au> or Dr Richard Vickery <richard.vickery@unsw.edu.au>. Any students considering an Honours year should discuss the requirements with the coordinator. Outstanding students may be considered for scholarships offered by the University and School. Please see:

SOMS (<http://medalsciences.med.unsw.edu.au/SOMSWeb.nsf/page/Honours+Current+Students>)

Neuroscience (<http://medalsciences.med.unsw.edu.au/SOMSWeb.nsf/page/Neuroscience+Honours>)

Postgraduate research degrees

The School of Medical Sciences offers students the opportunity to enter into a Masters (MSc) or Doctorate (PhD) program in Physiology. For further information contact the Postgraduate Coordinator, Dr David Simar <d.simar@unsw.edu.au>. Please see:

(<http://medalsciences.med.unsw.edu.au/SOMSWeb.nsf/page/Postgraduate+Research+Future+Students>)

Departmental Vacation Scholarships: The Department of Physiology supports several summer vacation scholarships each year to enable good students to undertake short research projects within the department. Please see:

(<http://medalsciences.med.unsw.edu.au/SOMSWeb.nsf/page/Opportunities+for+Research#med>)

The School Student Adviser is able to provide additional information on any courses offered by the School. Please contact Carmen Robinson (9385 2464) or (carmen.robinson@unsw.edu.au).

Mid-session and Final Exam format for Neurophysiology NEUR3221

MID-SESSION EXAMINATION

Time allowed: 50 minutes (in class)

Consists of 13 pages and is divided in 2 sections.

Section A

- This section contains 10 multiple-choice questions that are of equal value.
- This section is worth 40% of the total marks for this paper.
- It is suggested that 20 minutes be spent on this section.
- Answers to the questions must be marked on this exam.

Section B

- This section consists of 3 short answer questions that are of equal value.
- This section is worth 60% of the total marks for this paper.
- It is suggested that 30 minutes be spent on this section.
- Each question should be answered on the lined page of this exam.

FINAL EXAMINATION

Time allowed: 2 hours (centrally organised)

Consists of 24 pages and is divided in 2 sections.

Section A

- This section contains 30 multiple-choice questions that are of equal value.
- This section is worth 50% of the total marks for this paper.
- It is suggested that about 60 minutes be spent on this section.
- Answers to the questions must be marked on the provided answer sheet.

Section B

- This section consists of 6 short answer questions that are of equal value.
- This section is worth 50% of the total marks for this paper.
- It is suggested that 60 minutes be spent on this section.
- Each question should be answered on the lined pages of this exam.

Practical Report guidelines for Neurophysiology NEUR3221

Requirement: You must submit a practical report based on one of the 5 practicals that you took part in during the Neurophysiology course. It is strongly encouraged that you use your DIY prac as the basis of your report, since this work is unique to you.

Aims of the exercise: To help you to plan and carry-out a scientific experiment, report on your results and place the significance of your results in context of the literature.

Contribution to assessment: The Practical Report will contribute **15%** to your final mark for the course.

Due date: The last day on which the practical report can be submitted is Tuesday the 4th of October at midnight. Reports submitted after this time will lose 3% from the Practical Report grade per day (i.e., 0.45% of your final mark/day). Reports can be submitted any time before the deadline.

Where to lodge: Students must submit **BOTH a paper copy and an electronic copy**.

Paper copy: Submit your paper copy to the Student Office in Biological Sciences (Room G27). Ensure that your name, student number, Course and Convener are written on the submission form.

Electronic copy: Submit your electronic copy as a .DOC, .DOCX or .PDF. If you upload a Word doc, don't worry if the generated PDF looks odd (e.g., tables misaligned), I can access the original document and I will mark that.

In Blackboard, in the folder "Extra Stuff" will be a Turnitin submission box. Ensure that your name and student number, number of words, as well as the Course and Convener are clearly written on the cover page of your report. Contact A/Prof Bertrand (Paul.Bertrand@unsw.edu.au) if you have any problems submitting your assignment.

Word limit: 2500 words (excluding tables, figures, figures legends and references).

Format: Arial font, double-spaced with 2.5 cm margins and four equal length sections: Introduction, Methods, Results, Discussion.

Introduction: You should aim to provide the context and rationale for the experiment.

Methods: Try and write the Methods in your own words, provide enough detail that someone could reproduce your experiment, and clearly describe any differences between your procedures and those in the Prac Manual.

Results: Your data are usually best conveyed by figures or tables, and should indicate number of repetitions of each measurement.

Discussion: You should include an attempt to interpret the significance of your results, as well as suggestions for future experiments.

In addition, you should include the following sections which do not count against your total word limit:

- At the beginning of your report a Title page with your name, class and student number.
- At the end, you should put up to 20 references which you have cited (i.e., the Bibliography).
- Throughout the document, you may place your figures, tables and appropriate legends.

Marking: Each of the four sections is worth 25% of the Practical Report grade. We are looking for clarity of thinking (logical consistency, thoroughness, etc.) and clarity of expression (clear sequencing, and presentation of information). The data that you obtained in the practical class are important in terms of how you present them, and how they are discussed; this means that "wrong" results you may have obtained are perfectly acceptable provided you present them clearly, and discuss what may have led to these results.

Naming: Before you upload, please name your file "LASTNAME_studentnumber_topic.doc".

For example, if I wrote up the tactile psychophysics practical, my file name would be "BERTRAND_z1234123_tactile.doc".

Article report guidelines for Neurophysiology NEUR3221

Requirement: You must submit a report based on one of the 'Classic' research articles available on The Journal of Neurophysiology website (<http://www.physiology.org/site/125anniversary/jn.xhtml>). It is encouraged that you pick a paper early and form a group to discuss issues related to the paper.

Aims of the exercise: To help you develop and demonstrate expertise in critically examining a research paper in neurophysiology and convey the essence in a mini-review/Editorial-style report.

Contribution to assessment: The Article Report will contribute **15%** to your final mark for the course.

Due date: The last day on which the Article Report can be submitted is Wednesday the 17th of October at 12noon. Article Reports submitted after this time will lose 3% from the Article Report grade per day (i.e., 0.45% of your final mark/day). Reports can be submitted any time before the deadline.

Where to lodge: Students must submit **BOTH a paper copy and an electronic copy.**

Paper copy: Submit your paper copy to the Student Office in Biological Sciences (Room G27). Ensure that your name, student number, Course and Convener are written on the submission form.

Electronic copy: Submit your electronic copy as a .DOC, .DOCX or .PDF. If you upload a Word doc, don't worry if the generated PDF looks odd (e.g., tables misaligned), I can access the original document and I will mark that.

In Blackboard, in the folder "Extra Stuff" will be a Turnitin submission box. Ensure that your name and student number, number of words, as well as the Course and Convener are clearly written on the cover page of your report. Contact A/Prof Bertrand <Paul.Bertrand@unsw.edu.au> if you have any problems submitting your assignment.

Word limit: 1500 words (excluding tables, figures, figures legends and references). You should have an introductory paragraph, at least three main points that you are addressing and a summary paragraph. For your points, you should write about the essence of the research paper you have chosen. There is not a requirement that you explicitly cover all parts of the paper, or every figure in the paper. Your Introduction should aim to provide the rationale for the work, and will require you to read additional papers as background to help you understand the context of the research you are presenting. The methods and results of the article should not be presented as a separate sections, rather an relevant information should be included in your discussion of the main points. You may draw on the issues raised in the paper's discussion plus your own thoughts and those of other papers in the literature. A critical examination does not mean that you need to find fault with the paper, it means that you must be able to understand and convey the significance and reliability of the findings.

Format: Arial font, double-spaced with 2.5 cm margins. In addition, you should include the following sections which do not count against your total word limit:

- At the beginning of your report a Title page with your name, class and student number.
- At the end, you should put up to 10 references which you have cited which support the importance of the Article (i.e., the Bibliography).
- Throughout the document, you may place a figures or tables with appropriate legends.

Marking: We are interested in how well you were able to **convey the essential message** of the paper (40%). The skill here is to be able to ignore or summarise the non-essential material while highlighting the key research message. We are also looking for you to place your study within the context of the literature, especially modern studies that have been influenced by the research in your article (40%). Finally, we are looking for clarity of thinking (logical consistency, assessment of the validity/reliability of the technique) and clarity of expression (clear sequencing, legible figures/tables, clear writing) (20%).

Naming: Before you upload, please name your file correctly:

"LASTNAME_studentnumber_article-author-year.doc".

For example, if I wrote up the tactile psychophysics practical, my file name would be:

"BERTRAND_z1234123_Durstewitz-2000.doc".

In-class assignment for Neurophysiology NEUR3221

Requirement: You must complete two "short answer" style questions similar to those on the mid-session and final exam. Answer each question in no more than 1.5 pages. This assignment is open book/open notes and will be completed during normal class hours in week 5.

Aims of the exercise: To help you draw together topics from several lectures. To help prepare you for the Exams.

Contribution to assessment: This assignment will contribute 5% to your final mark for the course.

Dates: The in-class assignment will be given during the scheduled lecture time in week 5 on Wednesday 15/8. You will have 30 minutes to complete the in-class assignment (with an additional 5 minutes reading time).

Format: You will work alone in class at your desk. You may use any printed materials you bring to class. No computers, phones or online access will be allowed.

What to present: You should answer the question using information given in lectures, practicals or from your textbook.

Marking: You will be marked on the content of your answer. Although neatness and legibility are helpful, you will not be marked on your general written language skills. We are interested in how well you can tie together topics from different lectures.

Online quizzes for Neurophysiology NEUR3221

Requirement: You must complete two multiple choice quizzes online. questions are similar to those on the mid-session and final exam. The quizzes will go up on Blackboard on the Monday of week 4 (6/8) and the Friday of week 10 (24/9) and will be taken down 1 week later. You must complete these quizzes by the due date to receive credit. They will be made available a few days before the exams for revision purposes.

Aims of the exercise: To help you think about the course material in the context of multiple choice question-style assessment prior to the Exams.

Contribution to assessment: Together, the quizzes will contribute **5%** to your final mark for the course (2.5% each).

Due dates: The quizzes will be due one week after going up on Blackboard. Details and reminders will be given online.

Format: The quizzes will be given online and will consist of 10 multiple choice questions. At the end of the quiz, you will be given feedback on questions which you got wrong. If you did not score 100% correct, then you will then be prompted to try again.

Marking: You will receive the full 5% if you correctly complete all questions on both quizzes. **You may attempt the quiz as many times as you like in order to achieve a perfect score of 100% correct.**

Neurophysiology NEUR3221 - Timetable 2012

(always check Blackboard for latest timetable)

Wk	MONDAY (11 am - noon) Lecture - MatD	MONDAY (3-6 pm) (PRAC) - Bioscience 329	TUESDAY (5-6 pm) Lecture - Biomed E	WEDNESDAY (9-10 am) Lecture - Biomed E
1	16/7. Welcome BERTRAND and VICKERY	16/7. PRACS NOT STARTED	17/7. Synaptic Transmission POWER	18/7. Memory Systems POWER
2	23/7. Plasticity and Memory Formation POWER	23/7. NO PRAC	24/7. Somatosensory: Central VICKERY	25/7. Somatosensory: Peripheral VICKERY
3	30/7. Developing an Experiment VICKERY	30/7. PRAC-1A - Tactile psychophysics BERTRAND	31/7. Pain BERTRAND	1/8. NO CLASS
4 Quiz 1 up	6/8. NO CLASS	6/8. PRAC-1B - Tactile psychophysics BERTRAND	7/8. Kinaesthesia TAYLOR	8/8. Kinaesthesia TAYLOR
5	13/8. NO CLASS	13/8. PRAC-2 - Kinaesthesia TAYLOR	14/8. TUTORIAL 1 (Lectures and pracs) PB	15/8. In-class assignment (Lectures and pracs) PB
6 Articles up	20/8. Neuroscience Methods BERTRAND	20/8. PRAC-3A Nerve Recording VICKERY	21/8. Enteric nervous system BERTRAND	22/8. Axonal Function KRISHNAN
7	27/8. TUTORIAL 2A (Lectures/Pracs 7/8 - 25/8) PB	27/8. PRAC-3B Nerve Recording VICKERY	28/8. TUTORIAL 2B (Lectures/Pracs 7/8 - 25/8) PB	29/8. Mid-session EXAM (Lectures/Pracs 20/7 - 25/8) PB
-	1st - 9th Sept *	Mid-session	Break	
8	10/9. Vision: Binocular VICKERY	10/9. PRAC-4 - Visual & Auditory psychophysics VICKERY	11/9. Vision: Central VICKERY	12/9. Auditory: Cochlea / Hair cells HOUSLEY
9	17/9. Auditory: Central & Binaural HOUSLEY	17/9. PRAC-5A - DIY BERTRAND and VICKERY	18/9. TUTORIAL 3 (MS exam feedback) PB	19/9. Taste and Smell BERTRAND
10 Quiz 2 up	24/9. ARTICLE REPORT DUE 12noon at SOMS office	24/9. PRAC-5B - DIY BERTRAND and VICKERY	25/9. Sleep and Speech VICKERY	26/9. Glia Cells and Stroke CRAIG
11	1/10. LABOUR DAY	1/10. LABOUR DAY	2/10. CNS Development SHANNON-WEICKERT	3/10. Neurobiology of Mental Illness SHANNON-WEICKERT
12	8/10. Neuroimmunology LIM	8/10. NO PRAC	9/10. Brain Stimulation 1 BERTRAND	10/10. Brain Stimulation 2 VICKERY
13	15/10. CLASS FINISHED	15/10. TUTORIAL 5 (Lectures and pracs) PB	16/10. CLASS FINISHED	17/10. PRAC REPORT DUE 10am at SOMS office