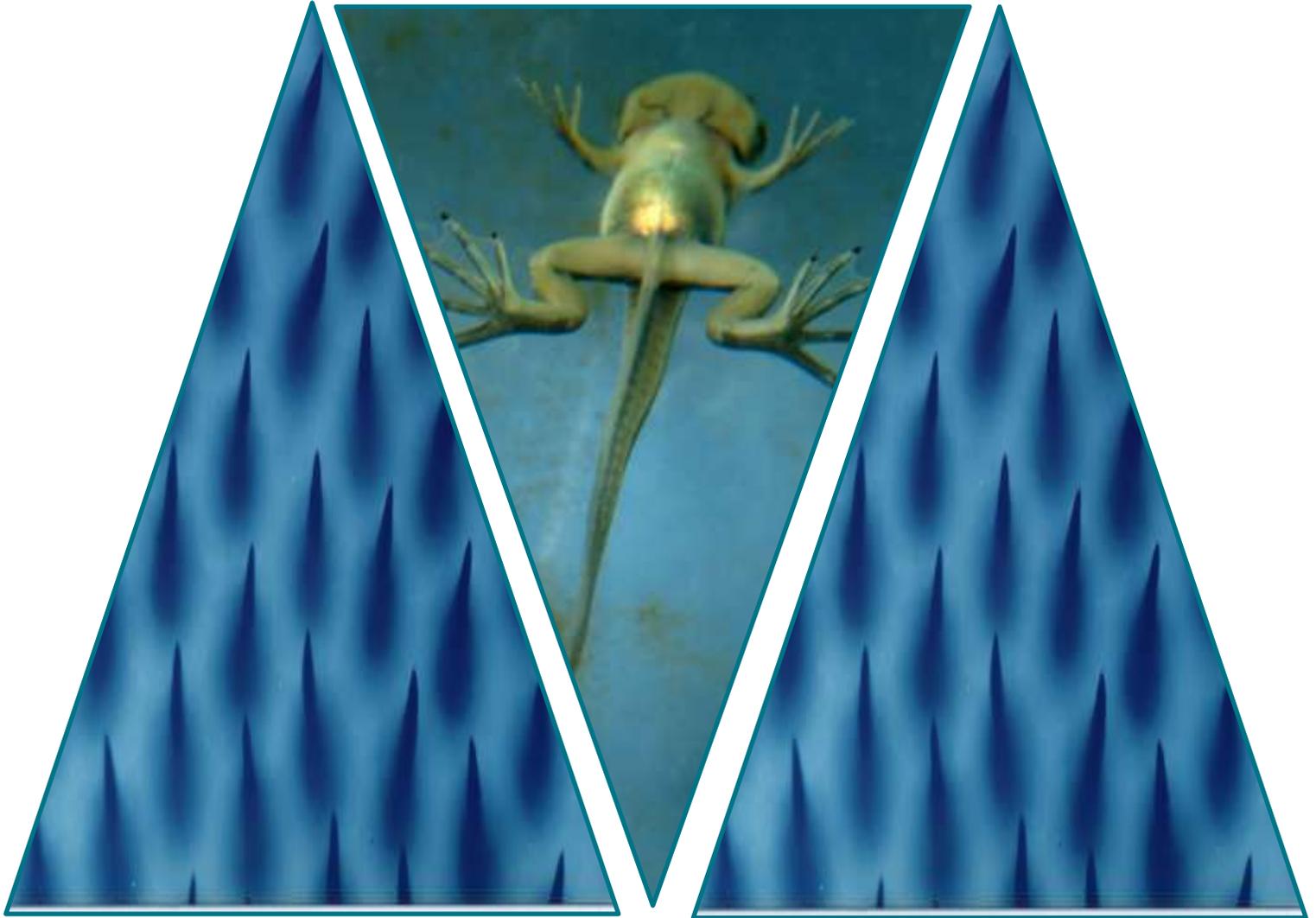




University of  
St Andrews

School of Psychology and Neuroscience



# Sub-Honours Neuroscience Handbook

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## Welcome

Welcome to the sub-honours years of your Neuroscience degree at the University of St Andrews. We look forward to working with you over the next few years as you progress from sub-honours student to graduate. This handbook gathers together much of the important information that you need during your sub-honours years, so please keep a copy in a safe place!

Our Neuroscience degree is a joint programme taught between Biology and Psychology & Neuroscience, with core modules in each School. Over the coming years you will study the nervous system in depth from molecules to behaviour. You will learn about a range of species from fruit flies to human and have the opportunity to apply your skills to an extended final year research project.

## Important Dates

### SEMESTER DATES

The Semester Dates for 2018/19 are available at: <https://www.st-andrews.ac.uk/semesterdates/2018-2019/>

### EXAMINATION DATES

The dates for 2018/19 are:

S1 Exam Diet: Saturday, 8 December – Friday, 21 December 2018

S2 Exam Diet: Saturday, 11 May – Friday, 24 May 2019

You must make sure that you are available in St Andrews for the entire duration of each exam diet. Do NOT book early travel home in the hope that you won't have an exam on the last day.

## Choosing your modules

There are a number of modules that you must take to study for a Neuroscience degree. The sub-honours options available to you are summarised below with compulsory modules in bold:

### FIRST YEAR

<b>Semester One</b>	<b>Semester Two</b>
<b>PS1001: Psychology</b>	<b>PS1002: Psychology</b>
<b>BL1101: Biology</b>	<b>BL1102: Biology</b>
Any other module from Arts, Science or Divinity, subject to availability and pre-requisites	Any other module from Arts, Science or Divinity, subject to availability and pre-requisites

### SECOND YEAR

<b>Semester One</b>	<b>Semester Two</b>
<b>PS2001: Psychology</b>	<b>PS2002: Psychology</b>
<b>BL2301: Cell Biology</b>	<b>BL2305: Cell Systems</b>
BL2300: Research Methods in Biology or BL2302: Molecular Biology or BL2303: Evolutionary Biology or BL2304: Invertebrate Zoology	BL2306: Biochemistry or BL2307: Ecology or BL2308: Vertebrate Zoology or BL2310: Comparative Physiology

Your Adviser of Studies will help you decide on the modules that are best suited to your future plans. You can take a look at the current degree structure at the back of this handbook.

- Students with enquiries about sub-honours choices must contact their sub-honours Adviser
- Students with enquiries about honours choices must contact Dr Pulver or Dr Li.

### CHANGING MODULES

At the start of each semester there is a period of re-advising when you can change your module choices. Re-advising closes at **1pm on the Monday of week 2** of each

semester. Beyond that there is a brief grace period when you can change modules with the permission of the pro-deans but your opportunity to switch modules is time limited so choose carefully: <http://www.st-andrews.ac.uk/students/advice/academic/changingmodulesordegree/>

## CHANGING DEGREE

We very much hope that you will stay with us as a Neuroscience student but if you do wish to change your degree title then this can be done during pre-advising at the end of 1<sup>st</sup> year and during any of the advising period in 2<sup>nd</sup> year. Entrant students may not alter their degree intention during the 1<sup>st</sup> year and must continue to study the required modules for that degree throughout the 1<sup>st</sup> year. If you are changing degree make sure that you have studied all of the required modules for the new degree stream.

## WITHDRAWAL FROM STUDIES

If you are considering withdrawing from your studies at the University you should discuss the matter with Student Services in the first instance. You should arrange to do this as early as possible as there are often alternative options open to you that would not require the final step of permanent withdrawal from the University. If you do decide you wish to withdraw from your studies, you must contact your Registry Support Officer who will be able to offer guidance on your options and who will ensure that the process is completed correctly. You should be aware that there are fee implications, as well as implications to your leave to remain in the UK if you are an overseas student, when you withdraw from your studies part of the way through an academic year. You should therefore ensure you contact the Money Adviser and the International Adviser in Student Services to obtain early advice on the final implications of your decision before you complete your withdrawal. Further information available at: <https://www.st-andrews.ac.uk/students/academic/academic-advising/glossary/withdrawal/>

## How do I manage my timetable?

You should do your best to avoid timetable clashes and any potential issues should be flagged up to your Adviser. It is your responsibility to organise your personal timetable and to ensure that you sign up for lab slots and tutorials that avoid timetable clashes. Module class times and locations are all available to you on-line and you should ensure that you know precisely where you should be for each class,

and when: <https://www.st-andrews.ac.uk/students/academic/timetablinginformation/>

There are various maps available on line to help you get around including recycling points and cycling and walking routes: <http://www.st-andrews.ac.uk/maps/>

## Attendance

Attendance is a basic assessment requirement for credit award, and failure to attend classes or meetings with academic staff may result in your losing the right to be assessed in that module. If you have missed timetabled classes/events or any other compulsory elements of the module due to illness (see below for more on illness) or an unavoidable pre-arranged event or appointment, you must complete a Self Certificate of Absence form as soon as possible. Please go to <http://mysaint.st-andrews.ac.uk/>, the relevant section can be found under 'My Details'.

Under certain circumstances, Schools may request further documentation in addition to the Self Certificate. In this case, students should contact Student Services to organise the appropriate documentation. If you submit more than three Self Certificates in a single semester, or if the period of absence extends to more than two weeks, you may be contacted by Student Services, the relevant Pro Dean, or by an appropriate member of staff in your School.

Completion of a Self Certificate is not an acceptable substitute for contacting your tutors well in advance if you have to be absent. Advance notice of absence is acceptable only for good reason (for example, a hospital appointment or job interview). It is your responsibility to contact the appropriate member of staff to complete any remedial work necessary.

If you are an international student (non-EEA nationals only), you will be affected by recent changes introduced by the UK in relation to immigration rules and visas. The University is now legally bound to report to the UKVI any student who fails to enrol on a module or programme of study, or who fails to attend, or who discontinues their studies.

## Assessment

### TYPES OF ASSESSMENT

For most of your modules your final grade will be determined by both coursework elements and an exam. Your module organiser will give full details of coursework assessments and deadlines in the module. Exams are run centrally by the examinations office and there are a number of rules surrounding exams of which you should be aware: <http://www.st-andrews.ac.uk/students/academic/examinations/frequentlyaskedquestions-exams/>.

All of the exam timetables are published on-line in the run up to each exam period <http://www.st-andrews.ac.uk/students/academic/examinations/examtimetablescurrent/>.

### GOOD ACADEMIC PRACTICE

Academic integrity is fundamental to the values promoted by the University. It is important that all students are judged on their ability, and that no student is allowed unfairly to take an advantage over others, to affect the security and integrity of the assessment process, or to diminish the reliability and quality of a St Andrews degree.

Academic misconduct includes *inter alia* the presentation of material as one's own when it is not one's own; the presentation of material whose provenance is academically inappropriate; and academically inappropriate behaviour in an examination or class test. Any work that is submitted for feedback and evaluation is liable to consideration under this Good academic practice policy. For more information, please visit: <http://www.st-andrews.ac.uk/media/teaching-and-learning/policies/gap.pdf>

### HOW AM I ASSESSED?

You may find that the methods of assessment that we use here are different to what you are used to. Make sure that you fully understand what is expected of you from your module organisers and don't be afraid to ask for clarification if you need it.

You will almost certainly find that the way you are graded is very different. In St Andrews we mark to a 20 point non-linear scale. For each piece of course work or exam question you will be given a mark and these marks will be combined to give

you your final grade for a module. The university outline scale can be seen at: <http://www.st-andrews.ac.uk/staff/teaching/examinations/scale/>

Throughout your time at university you should feel secure that there are a number of procedures in place to monitor how staff assess your work. These include second marking (where 2 markers mark your work and then reach an agreement on a grade), and moderation (where a selection of scripts are checked to ensure that the marking fits with the reporting scale). All of our procedures are annually reviewed by external examiners who are experts in the field from outwith St Andrews. The External Examining system is a crucial element of the University's quality assurance and enhancement structure, providing a means to ensure the quality and standards of awards, the standards of student performance and the validity of assessment processes.

#### WHAT IF I AM NOT HAPPY WITH MY MARK?

Sometimes it can be helpful to ask the person who graded your work for further feedback and a more in-depth explanation of where you can improve. In general, all of the information that you need to progress towards your next assignment will be in your written feedback. However, we do appreciate that there are times when you want to discuss what was written. In this case you should email the member of staff concerned and make an appointment to see them. Please remember that your marks are not the starting point in a negotiation and that we will stand by the mark given in all but the most exceptional circumstances.

Your coursework and exams are always carefully moderated and therefore you should feel confident in the marks and grades awarded. If you do have a concern about a mark or grade there is an academic appeals process available to students. An academic appeal is a request for a formal review of an academic decision submitted on limited grounds. A request for a review of an academic decision will ONLY be considered where at least one of the following three grounds are alleged to apply:

- extenuating personal circumstances materially affecting academic performance of which the University was not aware when the academic decision was taken, and which could not reasonably have been disclosed by the student (an explanation for earlier non-disclosure is always required)
- improper conduct of an assessment or examination, or irregular application of academic regulations, that has materially impacted on the result awarded

- in the case of an appeal against an academic misconduct judgement only, defective or irregular procedure that has materially affected the academic decision of the relevant Board of Adjudication.

In clarification, the University will NOT pursue an appeal that does nothing more than question the academic judgement exercised. For example, a student cannot appeal using these procedures simply because they are unhappy or disagree with a mark given to assessed work: <https://www.st-andrews.ac.uk/students/rules/appeals/policy/#d.en.58112>

To summarise, the best thing you can do if you get a bad mark is to get as much feedback as you can to help you improve your future work.

### HOW WILL I KNOW IF I AM DOING OK?

There are policies aimed at letting you know if problems are beginning to arise: academic alerts and early academic intervention. Thereafter, in some cases, studies can be terminated but the University aims to support students to avoid this outcome.

#### Academic alerts

Academic Alerts are a way of helping students who are having trouble coping with their studies, such as missing deadlines for handing in work, or missing compulsory tutorials. The aim of the Alert system is to help students by flagging up problems before they seriously affect students' grades. Academic Alerts will be issued by email from a member of staff within the relevant School and will tell students what is wrong and what they are required to do (e.g. attend classes in future). The Alerts will also tell students what support the University can offer. If students do not take the action required they will get another Alert, and eventually will automatically get a grade of zero and will fail that module. The system is designed to help and support students to remedy any problems or issues before these lead to failing a module. Alerts will never appear on a student's permanent transcript. For more information on Academic Alerts and details on how the categories work, see: <https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/AcademicAlerts.pdf>

Guidance for students is available at: <http://www.st-andrews.ac.uk/media/teaching-and-learning/policies/AlertsStudentGuide.pdf>

## Academic Intervention

To complement the academic alerts process, which is applied at a module level, the University operates an academic intervention process at an overall degree programme level. The principle is to help students recognise when their academic progress may be at risk, at a sufficiently early stage that they have opportunities to take action to address any underlying problems. More information is available at: <https://www.st-andrews.ac.uk/students/academic/intervention/>

## Termination of Studies on Academic Grounds

If your academic performance is unsatisfactory, i.e. you have gained insufficient credits to progress to the next stage of your degree programme or breached conditions of your probation, your studies may be terminated. You will then be notified by the Pro Dean (Advising) that your studies are terminated and you will have five working days to appeal this decision using the appropriate form. For more information, please see: <https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/UGRegs2016-17updated%20March17.pdf> – termination of studies is covered by items 44 and 45 and: <https://www.st-andrews.ac.uk/students/academic/intervention/termination-of-studies/>

International students here at St Andrews on a Tier 4 visa should be aware that any terminations will be reported to the UKVI and their visa curtailed.

Contact: Student Services, The ASC, 79 North Street, KY16 9AL. Telephone: 01334 462020. Email: [theasc@st-andrews.ac.uk](mailto:theasc@st-andrews.ac.uk)

To clarify, this pathway is aimed at helping you get your studies back on track rather than pushing for termination. The University of St Andrews fosters an ethos of getting the best out of our students and we take great pride in seeing our students reach their full potential.

## WHAT HAPPENS IF I FAIL A MODULE?

If you fail a module at first sitting you have the right to reassessment in the August exam diet, provided you scored **at least 4.0 in that module**. If you are facing reassessment it is important to consider what might have gone wrong and it is worth contacting the module organiser and asking to see your exam papers. You will be required to register for reassessment and pay a fee if necessary. If you are eligible for reassessment you will be invited to register in the early part of the summer vacation. <http://www.st->

[andrews.ac.uk/students/academic/examinations/frequentlyaskedquestions-exams/#Resits](http://www.st-andrews.ac.uk/students/academic/examinations/frequentlyaskedquestions-exams/#Resits)

## Study Support

The University has a range of support services available to students to help you make the most of your time studying Neuroscience. If you have areas in which you feel you would benefit from support, then take a look at the CAPOD website <http://www.st-andrews.ac.uk/capod/students/>. CAPOD offer both one-to-one appointments and drop-in sessions of a wide variety of topics from note-taking in lectures, help with studying for exams and support for students who need help with maths and statistics. There are occasionally skill support workshops specific to your topic of study. Remember to check out the workshops for both Biology and Psychology as there may be something useful to you from either School: <http://www.st-andrews.ac.uk/students/academic/subjectspecific/>

There are also a number of useful links on the School website to help you with your studies from statistics to essay writing: <http://www.st-andrews.ac.uk/psychology/current/info/>

Please take advantage of all that the University of St Andrews has to offer to support your sub-honours studies. You will need to attain the required standard for Honours entry by the end of second year and we will do our best to support you in making a smooth progression.

## Progression to Honours

If you have taken all of the required modules and have fulfilled all of the Science Faculty Regulations then, subject to academic performance, you will be offered a place in the Neuroscience Honours programme at the end of your second year. Neuroscience students need to fulfil the requirements for Honours entry to BOTH the School of Psychology & Neuroscience and the School of Biology.

Details of the criteria for honours entry are detailed in the programme requirements: <https://www.st-andrews.ac.uk/subjects/reqs/2018-19/USHFNCSNSC.html?1498133955232>

The Schools have no discretion over the Honours entry policy and this is administered centrally by the Deans' Office. Full details of the honours entry policies are available on the website.

Entry to honours: <http://www.st-andrews.ac.uk/media/teaching-and-learning/policies/honsentry.pdf>

Review of honours entry policy: <https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/HonsReview.pdf>

Science Faculty Regulations: <https://www.st-andrews.ac.uk/media/proctor/documents/ug-regs-18-19.pdf>

## Degree Regulations

A regulatory structure determined by Senate and Court governs the award of all degrees. Undergraduate Resolutions and Regulations are available at

<https://www.st-andrews.ac.uk/students/rules/ugsenateregulations/>

## What do I do if I am ill?

If you are unwell and will miss class, it is important that you let the University know as soon as possible. To do this you should fill out a self-certificate of absence form. <http://www.st-andrews.ac.uk/students/advice/academic/absencereporting/>. You may be required to submit supporting evidence for your absence. Your School will let you know if this is the case. You are responsible for obtaining any evidence required and any associated costs where applicable. It is recommended that you contact Student Services in the first instance if the School requires evidence.

University Regulations state that if a student is absent for 2 consecutive weeks they are at risk of being awarded no credits for the module. If you are in this situation, or believe that you may be, then you should consider taking a leave of absence. You may wish to contact your Adviser or Student Services to discuss this further. More details of the student absence policy are available on-line <http://www.st-andrews.ac.uk/media/teaching-and-learning/policies/Student%20Absence.pdf>

## ILLNESS AFFECTING DEADLINES

If you are ill and unable to meet the deadline for coursework submission you must request an extension. Extensions are only granted for exceptional and unforeseen circumstances and you should consider this before you apply. For sub-honours Psychology modules you must use the Notification of Student Problems form on the website: [https://standrews.eu.qualtrics.com/jfe/form/SV\\_81CS19optBqxdD7](https://standrews.eu.qualtrics.com/jfe/form/SV_81CS19optBqxdD7)

For modules in other schools the responsibility lies with you to ensure that you know the procedures for requesting an extension.

## ILLNESS AFFECTING YOUR EXAMS

If you are unable to sit an examination due to illness or other unavoidable reason you should do the following as soon as possible:

- Submit a Self-Certificate of Absence form.
- Notify the Examinations Officer ONLY if there is a problem submitting a Self-Certificate - please 'phone (01334) 464100.
- Contact the School for the module affected to make arrangements for deferred or alternative assessment.
- You might also want to discuss the issues affecting you with Student Services.

If you are worried about illness, personal issues, or academic performance you must make contact with the relevant people as early as possible to try to prevent problems affecting your grades. Remember we all want to see you make the most of your time here in St Andrews. The most important thing is that you get the correct advice and support to get better and continue with your studies. There are useful contacts and essential health numbers at the end of this handbook to ensure that you get the best care.

## What happens if things go wrong? - Academic appeals, complaints and disciplinary issues

The University is committed to ensuring as high a quality student experience as possible while studying at St Andrews. Occasionally things may go wrong and if you are experiencing a difficulty, or are dissatisfied with your academic experience, you should raise concerns as soon as possible. This allows effective resolutions to be worked out quickly.

Such issues normally fall into one of three categories:

- An appeal requesting a formal review of an academic decision - where, for example, the University has made a judgement about your assessed work or progression within a course of study which you have grounds to query (see the relevant Policy on Student Academic Appeals);
- Complaints - where you are dissatisfied with the quality or standard of service that you have received from any part of the University, either academic or non-academic (see the University's Complaints Handling Procedure);
- Disciplinary cases - where the University has grounds to believe that you have conducted yourself in an unacceptable manner in either an academic or non-academic context. Academic Misconduct is dealt with under the Good Academic Practice Policy; Non-Academic Misconduct is dealt with under separate procedures.

If there are extenuating personal circumstances that may affect your academic performance or impact on your progression you must bring these to the attention of an appropriate member of staff (for example your Academic Adviser, module coordinator or the appropriate Pro Dean) as soon as possible and normally prior to completing any assessment. If you base a subsequent academic appeal on such extenuating personal circumstances, you will be required to provide valid reasons to explain why you failed to notify the examiners or other relevant persons of these circumstances prior to completing the assessment.

### USING THE RIGHT PROCEDURE

If you are unsure whether to use the Appeals procedure or the Complaints procedure, there is a key question to ask yourself. What kind of outcome are you seeking? If you are seeking to have an academic decision changed (such as a mark or grade, a decision about progression, or termination of studies), then you must use the Appeals procedure. The permissible grounds for submitting an appeal are clearly detailed therein. If you are dissatisfied with the level of service you have received from the University, or if you believe that a service needs to be improved, or that the University has failed (for example) to follow one of its administrative processes properly, then the Complaints procedure is normally more appropriate. For matters involving teaching in general, there are also feedback opportunities through Staff-Student Consultative Councils, module questionnaires and School presidents.

You can make both a personal Complaint and an Appeal, by using both the Appeal and Complaints procedures, but it must be emphasised that changing an academic judgment or decision is not one of the outcomes from the Complaints procedure used alone.

### FURTHER GUIDANCE AND SUPPORT

The Students' Association provides independent and confidential help and advice for students who are contemplating submitting an academic appeal, complaint or are having discipline proceedings taken against them. The Students' Association employs Iain Cupples, the Student Advocate (Education), whose job it is to ensure that you receive help with writing and submitting a submission. Iain can also accompany you to any hearing. He should be your first point of contact as soon as you feel you need help.

### CONTACT

Iain Cupples, Student Advocate (Education); Telephone: 01334 462726; Email: [inc@st-andrews.ac.uk](mailto:inc@st-andrews.ac.uk)

## Studying Abroad

It is possible to spend a year or a semester of your undergraduate programme at an overseas university <http://www.st-andrews.ac.uk/studyabroad/outgoingstudents/>.

If you are interested in study abroad please contact Dr Pulver ([sp96@st-andrews.ac.uk](mailto:sp96@st-andrews.ac.uk)) and he can talk you through your options. Remember that in addition to studying abroad you can do an internship in an international laboratory during your summer break.

## Work Experience

A number of our students undertake laboratory placements over the course of their degree. It is difficult to get funding for 1<sup>st</sup> year students but students have previously been awarded funding for summer research projects at the end of their 2<sup>nd</sup> or 3<sup>rd</sup> years. If you wish to undertake summer research in St Andrews, take a look at the University web pages to find out what kind of research goes on here. <http://www.st-andrews.ac.uk/psychology/>

Once you have found an area that interests you, contact the potential supervisor early as many funding deadlines fall in January and February. There are a list of

potential funders on the School of Psychology & Neuroscience website and the careers centre also has some information on funding streams: <http://www.st-andrews.ac.uk/psychology/research/vacationscholarships/>

Of course there are many opportunities beyond St Andrews which you might wish to consider. Again the careers centre can direct you to a wide variety of internship schemes. You can also simply search for researchers who work in the field you are interested in and make contact via e-mail.

## Skills

When you graduate from your Neuroscience degrees you will have had the opportunity to learn and practice a range of skills which can help you with whatever career you choose to follow when you graduate:

1. Demonstrate original thought
2. Construct a coherent argument or debate by demonstrating logical processing of (complex) information and deductive reasoning
3. Apply critical analysis, evaluation and synthesis to solve complex problems
4. Test hypotheses, theories, methods and evidence within their proper contexts
5. Reason from the particular to the general
6. Identify relevant techniques and concepts to solve advanced and complex problems
7. Demonstrate use of an appropriate range of resources to the task at hand
8. Evaluate relevant best practices for the task at hand
9. Engage directly with current research, developments and skills in the discipline
10. Engage with primary and secondary material and differentiate between them
11. Demonstrate active learning
12. Demonstrate reflective learning, including the ability to engage with and learn from feedback
13. Demonstrate creativity and curiosity
14. Demonstrate independence of thought and reasoning
15. Demonstrate skills in time management, self-discipline and self-motivation
16. Demonstrate skills in close textual and comparative analysis
17. Demonstrate skills in close analysis of visual material
18. Demonstrate advanced IT skills
19. Demonstrate quantitative and qualitative methods of analysis
20. Demonstrate expertise in the use of statistical software packages for recording, manipulation & analysis of data

21. Convey statistical results & methods in a manner understandable to the lay-person via written or oral reports
22. Work independently
23. Work as part of a team
24. Communicate with clarity and accuracy, orally (including presentation) and in writing
25. Engage with the views and opinions of others
26. Present work and findings in a professional manner, with attention to detail
27. Learn and use research skills

## So what can you do with a Neuroscience degree?

Our graduates go on to a wide range of careers and it can be useful to start thinking about where your ambitions lie. For example, some of the things that our recent graduates have gone on to do include:

PhDs in Neuroscience

Masters degrees in Neuroscience

Medicine

GSK Future Leaders Programme

Secondary School Teaching

Previous graduates have gone on to a range of careers from a wide variety of fields.

For more on what Neuroscience graduates can do in the future, visit:

<http://www.st-andrews.ac.uk/careers/>

## Help and support beyond academia

As well as a new system of learning, many of you will be entering a new chapter in your lives, living away from home for the first time. Again, there are a variety of resources available to you, so please use them.

### THE ASC

As a University of St Andrews student you are on a journey of learning. The person you arrived as will be different from the one who leaves. This change will reflect the knowledge and skills you will gain, and the experiences you will have throughout your time here. It is unlikely that your journey will always be smooth, but dealing with the unexpected challenges you encounter along the way will help you develop the skills you need to make you a better scholar and better able to cope with life beyond university.

Key areas to focus on during your St Andrews journey include:

1. Developing independence. This means that you actively seek out information, take charge of finding the right balance between your study and personal life and take responsibility for your behaviour.
2. Facing challenges. It's perfectly normal to find things challenging in your academic studies and general student life. Some challenges may lead to disappointment or even failure. The important thing to remember is that you will be strengthened by these challenges, developing important life-skills such as problem-solving and resilience.
3. Being involved. As a student at St Andrews you are part of several communities, and you have the opportunity to become involved with them. You are part of the community within your academic school, part of the broader University community and part of the wider community of the St Andrews town. You are encouraged to make the most of the academic, social, societies and sports opportunities on offer as a way to positively build knowledge, skills, support networks, and physical and mental wellbeing.

For advice and support on any issue, including academic, financial, international, personal or health matters, or if you are unsure of who to go to for help, please contact the Advice and Support Centre, 79 North Street, 01334 462020, [theasc@st-andrews.ac.uk](mailto:theasc@st-andrews.ac.uk) , <https://www.st-andrews.ac.uk/ask-a-question/> . You are also welcome to contact the School's Student Wellbeing Officer for support (Dr. Paula Miles: [psyneuro\\_wellbeing@st-andrews.ac.uk](mailto:psyneuro_wellbeing@st-andrews.ac.uk) ).

## NIGHTLINE

Nightline is a confidential and anonymous listening and information service run by students and for students every night of term time. The number is 01334 462266. If you want to speak to another student, in confidence, about anything, give them a call. They are also there for information about St Andrews (including exam timetables). On-line chats are also available during term time:

<http://www.st-andrews.ac.uk/nightline/>

## STUDENTS FROM OVERSEAS

Neuroscience is an international course with over one third of our current final year students coming from beyond the EU. Overseas students have many additional administrative considerations such as visas and international money

transfers to contend with. All of the information you might need on such matters is available on the university website: <http://www.st-andrews.ac.uk/international/>

## MONEY MATTERS

Managing your money at University is not always easy and there are a range of documents on the website to help you <http://www.st-andrews.ac.uk/students/money/>. You can also discuss any financial issues with the ASC.

For students facing financial difficulties the University has a discretionary fund. This is a fund given to the University by the government to assist both undergraduate and postgraduate students. Money is allocated to **home students** who can provide evidence of financial hardship targeting particular groups including independent students, students with dependents, part-time students, final year undergraduates and students with extra costs due to health and disability: <https://www.st-andrews.ac.uk/students/money/financialsupport/discretionaryfund/>

Similar support is available to **overseas students, including those from the EU** through the international welfare fund: <https://www.st-andrews.ac.uk/students/money/financialsupport/internationalstudenthardshipfund2018-19/>

In addition, all students facing exceptional financial difficulties can apply to the welfare fund: <https://www.st-andrews.ac.uk/students/money/financialsupport/welfaregrantfund2018-19/>

Any students with an acute cash flow problem can apply to the university loan fund for a short-term interest free loan. <https://www.st-andrews.ac.uk/students/money/financialsupport/universityloanfund2018-19/>

To help with the cost of studying there are a few scholarship schemes available to students which you may not be aware of. Some of these have very tight eligibility criteria but they are definitely worth taking a look at: <http://www.st-andrews.ac.uk/study/ug/fees-and-funding/scholarships/>

## Life beyond modules...

The most crucial outcome from your time in St Andrews is a good degree demonstrating your strong academic performance. But it is also important to keep

up with hobbies and interests, and to meet students from all walks of university life. There are a range of clubs and activities that you might wish to consider:

<http://www.st-andrews.ac.uk/study/why/life/students-association/>

### CLASS REP

Each year from second year upwards has a class representative for Neuroscience who can collate and pass on the views of the year group. For first year students there are class reps for the major subject modules but not for the degree. Class reps have responsibility for attending a variety of meetings to represent their cohort. This is not a position to undertake lightly as it will not help your classmates if you fail to attend meetings. On the other hand, this position demonstrates leadership and responsibility and will look good on your CV!

### THE MAZE

The Maze is a student led magazine and any of our students can submit an article on a topic that they are interested in, in the fields of Psychology and Neuroscience. You can view a sample issue and get some more information on-line. This is a great opportunity to practice your writing skills and get your thoughts and ideas in print. Here is an example of a recent edition: <https://www.st-andrews.ac.uk/media/school-of-psychology/teachingdocs/newsletters/Maze%20issue%208.pdf>

### FACEBOOK

There is a Facebook page for Neuroscientists in St Andrews and you can request to join this. It would be great if the Neuroscience Facebook community could be as active and informative as possible so use it to post ideas and news articles that may be of interest to your fellow Neuroscientists as well as to advertise social events.

### NEUROSCIENCE SOCIETY

Neuroscientists can of course join the Neuroscience society. This brings together all of the students studying Neuroscience and they plan a number of events from social evenings to academic talks:

<https://www.yourunion.net/activities/society/6663/>

## Key Contacts

### MODULE CONTROLLERS

PS1001 and PS1002	Dr Paula Miles	<a href="mailto:pjmu@st-andrews.ac.uk">pjmu@st-andrews.ac.uk</a>	462089
BL1101	Dr P J Coote	<a href="mailto:pjc5@st-andrews.ac.uk">pjc5@st-andrews.ac.uk</a>	463406
BL1102	Dr M Webster	<a href="mailto:mmw1@st-andrews.ac.uk">mmw1@st-andrews.ac.uk</a>	461690
PS2001 and PS2002	Mr Paul Gardner	<a href="mailto:plg@st-andrews.ac.uk">plg@st-andrews.ac.uk</a>	462075
BL2301	Dr Judith Sleeman	<a href="mailto:jes14@st-andrews.ac.uk">jes14@st-andrews.ac.uk</a>	463524
BL2305	Dr Gerald Prescott	<a href="mailto:grp2@st-andrews.ac.uk">grp2@st-andrews.ac.uk</a>	463562

### ADVISERS OF STUDIES

Sub-honours	Dr Gayle Doherty	<a href="mailto:ghm@st-andrews.ac.uk">ghm@st-andrews.ac.uk</a>	463611
	Or Mr Paul Gardner	<a href="mailto:plg@st-andrews.ac.uk">plg@st-andrews.ac.uk</a>	462075
	Or Dr Justin Ales	<a href="mailto:jma23@st-andrews.ac.uk">jma23@st-andrews.ac.uk</a>	463043
JH Adviser	Dr Wenchang Li	<a href="mailto:wl21@st-andrews.ac.uk">wl21@st-andrews.ac.uk</a>	463579
SH Adviser	Dr Stefan Pulver	<a href="mailto:sp96@st-andrews.ac.uk">sp96@st-andrews.ac.uk</a>	463503

### OTHER IMPORTANT NEUROSCIENCE CONTACTS

Head of School	Professor Gareth Miles ( <a href="mailto:psy-hos@st-andrews.ac.uk">psy-hos@st-andrews.ac.uk</a> )
Director of Teaching	Dr Mike Oram ( <a href="mailto:psydot@st-andrews.ac.uk">psydot@st-andrews.ac.uk</a> )
Examinations Officer	Dr Dhanraj Vishwanath ( <a href="mailto:dv10@st-andrews.ac.uk">dv10@st-andrews.ac.uk</a> )
Degree Controller	Dr Gayle Doherty ( <a href="mailto:ghm@st-andrews.ac.uk">ghm@st-andrews.ac.uk</a> )
Disability coordinator	Dr Reiner Sprengelmeyer ( <a href="mailto:rhs3@st-andrews.ac.uk">rhs3@st-andrews.ac.uk</a> )
UG Teaching Administrator	Toni Ellen ( <a href="mailto:tse3@st-andrews.ac.uk">tse3@st-andrews.ac.uk</a> )
Teaching Office	<a href="mailto:psych@st-andrews.ac.uk">psych@st-andrews.ac.uk</a>

## Current Neuroscience Degree Structure

### FIRST YEAR

Semester One	Semester Two
<b>BL1101:</b> Biology 1 (20 credits)	<b>BL1102:</b> Biology 2 (20 credits)
<b>PS1001:</b> Psychology 1 (20 credits)	<b>PS1002:</b> Psychology 2 (20 credits)
20 credits from any other module in the faculties of science, arts or divinity for which you have the pre-requisites	20 credits from any other module in the faculties of science, arts or divinity for which you have the pre-requisites

**First Year Notes:** You may not switch degree programme during your first year and therefore must take the BL and PS modules that are required for the Neuroscience degree.

At the end of first year you should have 120 credits.

### SECOND YEAR

Semester One	Semester Two
<b>BL2301:</b> Cell Biology (15 credits)	<b>BL2305:</b> Cell Systems (15 credits)
<b>PS2001:</b> Psychology 1 (30 credits)	<b>PS2002:</b> Psychology 2 (30 credits)
<b>BL2300:</b> Research methods in biology (15 credits) <u>OR</u>	<b>BL2306:</b> Biochemistry (15 credits) <u>OR</u>
<b>BL2302:</b> Molecular biology (15 credits) <u>OR</u>	<b>BL2307:</b> Ecology (15 credits) <u>OR</u>
<b>BL2303:</b> Evolutionary biology (15 credits) <u>OR</u>	<b>BL2308:</b> Vertebrate zoology (15 credits) <u>OR</u>
<b>BL2304:</b> Invertebrate zoology (15 credits)	<b>BL2310:</b> Comparative physiology (15 credits)

**Second Year Notes:** If you require to take extra credits because you do not have 120 credits at the end of first year, make sure that these do not clash with your second year lectures.

Students wishing to take additional credits who do not have a credit deficit will not normally be permitted to do so.

If you wish to change degree programme prior to honours, this is the time to do it.

At the end of second year you will need to have grades of II or better in your 2000 level modules to qualify for automatic honours entry. See: [www.st-andrews.ac.uk/media/teaching-and-learning/policies/honsentry.pdf](http://www.st-andrews.ac.uk/media/teaching-and-learning/policies/honsentry.pdf)

## THIRD YEAR

Semester One	Semester Two
<b>PN3313:</b> Neuroscience (20 credits) <b>PS3037:</b> Perception (10 credits) <u>OR</u> <b>PS3038:</b> Cognition (10 credits)	<b>PN3312:</b> Neuropharmacology (20 credits) <b>BL3303:</b> Membranes and cell communication (20 credits) <u>OR</u> <b>BL3319:</b> Animal behaviour: a quantitative approach (20 credits) <u>OR</u> <b>BL3323:</b> Terrestrial zoology (20 credits)
<b>PN3321:</b> Advanced critical reading party (10 credits) <u>AND</u> <b>BL3320:</b> Statistical and quantitative skills for biologists (10 credits)* <u>OR</u> <b>PS3021:</b> Research design and analysis 1 (15 credits)	<b>BL3310:</b> Bioenergetics (20 credits) <u>OR</u> <b>BL3311:</b> Infection and disease (20 credits) <u>OR</u> <b>PS3032:</b> Assessment in clinical psychology (10 credits) <u>AND/OR</u> <b>PS3033:</b> Developmental psychology (10 credits)***
<b>PS3035:</b> Cognitive and behavioural neuroscience (10 credits)** <b>BL3301:</b> Protein structure and function (20 credits) <b>BL3302:</b> Gene regulation (20 credits)	

**Third year notes:** \* The BL2300 pre-requisite on this module has been waived for students undertaking the BSc Neuroscience degree.

\*\*If you opt NOT to take PS3035 in 3<sup>rd</sup> year, you will be required to take it in 4<sup>th</sup> year

\*\*\* PS3032 and PS3033 are usually paired to give 20 credits and thus 60 in total for Semester 2  
 Other 3000-level modules in Biology or Psychology & Neuroscience may be substituted with the approval of the degree controller.

At the end of 3<sup>rd</sup> year you should have at least 360 credits.

### Third Year BL modules with additional pre-requisites:

Module	2 <sup>nd</sup> year modules required
<b>BL3301:</b> Protein structure & function	<b>BL2302:</b> Molecular biology <u>AND</u> <b>BL2306:</b> Biochemistry
<b>BL3302:</b> Gene regulation	<b>BL2302:</b> Molecular biology <u>AND</u> <b>BL2306:</b> Biochemistry
<b>BL3310:</b> Bioenergetics	<b>BL2302:</b> Molecular biology <u>OR</u> <b>BL2306:</b> Biochemistry
<b>BL3311:</b> Infection & disease	<b>BL2302:</b> Molecular biology <u>OR</u> <b>BL2309:</b> Applied molecular biology
<b>BL3319:</b> Animal behaviour: a quantitative approach	<b>BL2303:</b> Evolutionary biology <u>OR</u> <b>BL2307:</b> Ecology <u>OR</u> <b>BL2310:</b> Comparative physiology
<b>BL3323:</b> Terrestrial zoology	<b>BL2310:</b> Comparative physiology <u>AND</u> ( <b>BL2304:</b> Invertebrate zoology <u>OR</u> <b>BL2308:</b> Vertebrate zoology)

## FOURTH YEAR

*Pre-requisites (except PN3312 & PN3313) are in brackets after each module as appropriate:*

Semester one	Semester two
<p><b>PN4299:</b> Neuroscience research project (60 credits across 2 semesters) <u>OR</u>  <b>BL4200:</b> Literature-based research project (30 credits across 2 semesters)</p>	<p><b>PN4299:</b> Neuroscience research project (60 credits across 2 semesters) <u>OR</u>  <b>BL4200:</b> Literature-based research project (30 credits across 2 semesters)</p>
<p>*<b>PN4230:</b> Neurodegeneration &amp; ageing (15 credits; <i>BL3303</i>) <u>AND/OR</u>  <b>PN4235:</b> Motoneurons: from physiology to pathology (15 credits)</p>	<p>* <b>PN4231:</b> Neuromodulation (15 credits) <u>AND/OR</u>  <b>PN4234:</b> Synaptic transmission (15 credits)</p>
<p><b><u>You will need 0-75 credits from the elective modules:</u></b>  <u>Elective modules in Biology (all 15 credits):</u>  <b>BL4210:</b> Practical skills for molecular biology &amp; biochemistry  <b>BL4211:</b> Antimicrobials- mode of action and resistance (<i>BL3311</i>)  <b>BL4213:</b> Molecular virology (<i>BL3311</i>)  <b>BL4215:</b> Bacterial virulence factors (<i>BL3301</i>)  <b>BL4216:</b> Structure-based drug discovery  <b>BL4222:</b> Metabolic &amp; clinical biochemistry  <b>BL4223:</b> Molecular and cell biology of eukaryotic DNA replication (<i>BL3301 AND BL3302</i>)  <b>BL4225:</b> Advanced microscopy &amp; image analysis – seeing is believing (<i>BL3303 OR BL3315</i>)  <b>BL4232:</b> Neuroethology  <b>BL4251:</b> Tropical marine biology****  <b>BL4255:</b> Marine &amp; environmental biotechnology  <b>BL4258:</b> Foraging in marine mammals (<i>BL3319</i>)  <b>BL4260:</b> Biological oceanography (<i>BL3318</i>)***  <b>BL4262:</b> Environmental driver of marine habitats  <b>BL4266:</b> Conservation research methods (<i>BL3309</i>)***  <b>BL4274:</b> Evolutionary developmental biology  <b>BL4275:</b> Evolution in action</p>	<p><u>Elective modules in Biology (all 15 credits):</u>  <b>BL4224:</b> Molecular mechanisms of membrane trafficking (<i>BL3303</i>)  <b>BL4226:</b> Chromatin &amp; genome stability (<i>BL3302</i>)  <b>BL4249:</b> Scientific diving (<i>BL4251</i>)  <b>BL4254:</b> Fisheries research (<i>BL3309</i>)***  <b>BL4256:</b> Marine bioacoustics  <b>BL4259:</b> Marine mammals and man (<i>BL3318</i>)***  <b>BL4263:</b> The question of culture in cetaceans (<i>BL3319</i>)  <b>BL4268:</b> Science communication of biodiversity &amp; conservation (<i>BL3309</i>)***  <b>BL4270:</b> Plant-environment interactions  <b>BL4285:</b> Complex systems in animal behaviour  <b>BL4286:</b> Advanced topics in evolution</p>

<p><b>BL4278:</b> Biology of dinosaurs &amp; other extinct vertebrates</p> <p><b>BL4279:</b> The CRISPR system for antiviral defence &amp; genome engineering (BL3302)</p> <p><b>BL4280:</b> Evolution &amp; human behaviour</p> <p><b>BL4281:</b> Animal behaviour &amp; cognition</p> <p><b>BL4288:</b> Major review paper in evolutionary biology (BL3307)***</p> <p><b>BL4289:</b> Animal cognition</p>	
<p><u>Interdisciplinary elective module (15 credits):</u></p> <p><b>ID4001:</b> Communication &amp; teaching in science **</p>	
<p><u>Elective modules in Psychology &amp; Neuroscience (all 15 credits):</u></p> <p><b>PS4071:</b> Behavioural neuroscience</p> <p><b>PS4074:</b> Cognitive psychology &amp; emotional disorders</p> <p><b>PS4083:</b> Psychology of music</p> <p><b>PS4085:</b> Evolution &amp; development of social &amp; technical intelligence</p> <p><b>PS4089:</b> Neural basis of episodic memory</p> <p><b>PS4091:</b> Computer-aided research</p> <p><b>PS4093:</b> The psychology of dementia</p> <p><b>PS4100:</b> The psychology of terrorism</p>	<p><u>Elective modules in Psychology &amp; Neuroscience (all 15 credits):</u></p> <p><b>PS4069:</b> Group behaviour</p> <p><b>PS4079:</b> Sex differences &amp; gender development</p> <p><b>PS4084:</b> Psychology of art: aesthetics &amp; individual differences in visual function</p> <p><b>PS4094:</b> Communicating psychology &amp; neuroscience</p> <p><b>PS4095:</b> Psychopathology</p> <p><b>PS4096:</b> Mechanisms of behaviour: integrating psychological &amp; neuroscience perspectives</p> <p><b>PS4097:</b> Research methods in cognitive neuroscience</p>

**PLEASE NOTE: Not all modules run in every academic year**

**Fourth year notes:** \*At least 15 credits from PN4230-4290 must be taken during the academic year

\*\* To take this module you need to apply during second semester of 3<sup>rd</sup> year. See: <https://www.st-andrews.ac.uk/students/academic/interdisciplinary-modules/communication-teaching-science/>

\*\*\* The pre-requisites for this module mean that you will have had to have deviated from the traditional 3<sup>rd</sup> year structure with the permission of the degree controller to obtain these

\*\*\*\* You must take BL4251 in Semester 1 if you wish to take BL4249 in Semester 2

If you did not take 20 credits of Psychology including PS3035 you must fit this in to your 4<sup>th</sup> year timetable

Other 3000-level and 4000-level modules in Biology or Psychology & Neuroscience may be substituted with the approval of the degree controller.

You should have at least 480 credits by the end of 4<sup>th</sup> year.