

LTC17D062

Title: **New Course Proposal:**
BSc in Pharmacology and Drug Discovery with Foundation Year
Author: Karin Goodby
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Issue

To receive a **report on new (risk category 1: low risk) courses** for the following courses within the Schools of the Science Faculty:

Undergraduate:

Pharmacy BSc in Pharmacology and Drug Discovery with Foundation Year

Recommendation

None.

Resource Implications

Not applicable.

Risk Implications

Not applicable.

Equality and Diversity

Not applicable.

Timing of decisions

Not applicable.

Further Information

Contact details: Karin Goodby, Learning and Teaching Coordinator, telephone 01603 593505, email: k.goodby@uea.ac.uk for enquiries about the content of the paper.

Background

Not applicable.

Discussion

Not applicable.

Attachments

1. CP1- Course Proposal Outline Form
2. CP4- Academic Design

UEA Course Approval Process

Course Proposal Outline guidance notes

for Taught Programmes only



Stage 1

The **Course Proposal Outline (CP1)** is designed to articulate the initial proposition in a standard format. The Academic Lead should complete the form, summarising the idea underpinning the proposal and identifying potential resource implications. Once approved by the Head of School, the completed, signed form (using an electronic signature) should be forwarded electronically (in Word Format) to the Senior Faculty Manager (SFM) to take forward for consideration by the relevant Associate Dean(s), copying in LTS Coordinator who supports the School. The Associate Dean (L&T) will consider the outline proposal and assign a level of risk*.

For **Category 1 (low risk)** proposals the SFM will notify both the Secretary to FLTQC and the LTS Coordinator for the School. The latter will work with the Academic Lead to complete the relevant sections of the **Academic Design (CP4)** before reporting the approved case to FLTQC, via the FLTQC secretary. For **Category 2 (standard risk)** proposals the SFM will notify the relevant School Manager who will complete a **Business Case (CP2)**, supported by a **Finance Plan (CP3)** prepared by the Finance Manager. Once completed these should be returned to the SFM who will forward the full proposal to ARM Executive, via the ARM PA, for comments and recommendations to be recorded and reported to Faculty Executive(s). Once considered and approved by the relevant Faculty Executive(s), the SFM will notify the outcome to the Secretary to FLTQC and the LTS coordinator for the School. The latter will work with the Academic Lead to complete the Academic Design (CP4) before progressing to FLTQC (via the FLTQC secretary) and finally UEA LTC for consideration, recommendations and/or approval.

*Guidance on risk categories. This is an indicative list; if there is any doubt please consult the Head of LTS.

Category One – Existing Content (Low risk proposals)	Category Two – New Content or Courses (Standard risk proposals)
Variant to an existing degree (excluding Year Abroad where the overseas marks count for degree classification)	Year Abroad variants where the overseas marks count for degree classification
Cross-school proposals, where less than 25% of the programme is in another Faculty	Cross-school proposals, where more than 25% of the programme is in another Faculty
Proposals that involve a placement component where the planned placement activity is already offered within the faculty. e.g. Year in Industry	Proposals that involve a placement component where the planned placement activity is not already offered within the faculty. e.g. Year in Industry
Amendments to a course where existing teaching content is re-organised into new modules	Amendments to a course where more than 20% of the content of the programme is new or changing
Change in degree course title, where no more than 20% of the content of the programme is new or changing	New course proposals, or amendments to an existing course, that have significant resource implications
Change in school of registration	Proposals in a new subject area (new market)
Proposals whereby existing programmes are being merged into one	Proposal involving collaboration with an external partner
New course arising from separation of pathways within an existing course	Proposals that require Professional, Statutory & Regulatory Body (PSRB) accreditation
Changes to existing courses with PSRB accreditation where the accrediting body is content.	Proposals that include a non-standard mode of delivery e.g. online
	Proposals where some or all of the delivery will be delivered off campus
	New award not previously offered by the University

Course update To ensure that we can manage cohorts of students appropriately when changes are made, the low-risk NCP process will be used to record Course Update changes falling into Category One above. Depending on the nature of the change, not all of CP1 will be required; please put 'n/a' in the box if it is not appropriate for the box to be completed. For some minor changes to the course as a result of Course Update a new version of the course is not required, for example when changing the optional modules available (adding, removing and/or swapping) or reclassifying a compulsory module as optional. In these cases this CP1 form does not need to be completed at all.

Instructions for completion are integrated into the form, in green. When completing the form, please remove this text and complete the form in black ink.

Course Proposal Outline Form (CP1) for Taught Programmes only

Course proposal reference number	CP PHA101017 – BSc in Pharmacology and Drug Discovery with Foundation Year
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Please fully complete and forward electronically to the Senior Faculty Manager, copied to the LTS coordinator for the School and the the secretary to FLTQC.

Title of course (including award)	BSc in Pharmacology and Drug Discovery with Foundation Year
Date of first student intake/year of implementation	2018/19
Duration of degree	One year foundation year plus transfer to the current BSc Pharmacology and Drug Discovery (four years total)
School(s) of Study	PHA
Proposer (Lead Academic)	M. Searcey

Part 1 – Description of proposal

1.1.1	Provide a brief description of the proposal	This is a variant of the current BSc in Pharmacology and Drug Discovery (PDD) that begins with a Science foundation year. One module (20 credits) of the foundation year will be a bespoke course for the students on this module (Foundation in Pharmacology and Drug Discovery). Otherwise students will take the Chemistry, Biology and Maths modules of the current SCI-based foundation year offerings. Students who pass the year will progress onto the BSc PDD
1.1.2	What are the unique selling points of the course?	The course will largely be aimed at widening-participation, attracting in students from backgrounds that differ from traditional "A"-level routes, that have previous educational backgrounds in different, non-science areas or that come from schools that do not normally offer a route into a University education. PDD is attractive to students wishing to follow a career in the pharmaceutical industry at the chemistry/biology and at the moment, we do not have a foundation year/WP route into the degree offering.
1.1.3	How does the course complement the existing School/Faculty/ University portfolio of courses?	The school currently offers the 3 year BSc in Pharmacology and Drug Discovery which over-recruited against its (modest) targets in the both years of operation so far. The BSc runs in parallel to the MPharm in Pharmacy. Both of these courses have a significant amount of medicinal chemistry and pharmacology, both teaching and research based strengths of the school. Students on the current Pharmacy with Foundation Year course can choose to move to the PDD BSc and some have done this. Similarly, students from other school foundation years (CHE and BIO) have joined or indicated that they would like to join the degree. Offering the Foundation Year course will allow us to enhance the students abilities in the specific area of PDD alongside the more generic chemistry, biology and maths of the FY.

1.1.4	How does the course join up with the School Plan (including Admissions, Teaching, Employability and Research)?	UEA School of Pharmacy is one of the top Schools in the UK and is consistently competitive in league table performance compared with other Schools at UEA. Due to poor national coverage of pharmacy (for example, cuts in funding for community pharmacy), it is becoming more difficult to recruit pharmacy students at a national level. This is also reflected in the admissions data at UEA. PDD was started in part to reflect this trend and to maintain Home/EU student numbers in the School, but also as a recognition that some pharmacy students do not want to practice and prefer the lab based sciences and that there is a demand for pharmacologists with enhanced chemistry knowledge in the pharmaceutical industry. At the Foundation level, the School has been successful in attracting students to the Pharmacy with Foundation Year course and ALL of the current cohort (37) have a WP background. A PDD with foundation year course will further enhance the numbers of the foundation year and also the Schools contribution to WP, while generating a cohort of students able to progress onto the BSc.
1.1.5	Please provide an estimate of additional student numbers to be included in the School student numbers targets (up to and including steady state)	10 students in Year 1, increasing to 15-20 depending on the popularity of the course.
1.1.6	Please include details of market intelligence/market scanning to support the proposal	<p>We had several enquiries throughout the academic year and in clearing about whether we offer PDD with a FY. Those applicants were directed towards the Chemistry FY, which is not ideal.</p> <p>Anecdotally, at a recent meeting of Pharmacy School Admissions officers, Dr Zoe Waller, our admissions director, reported that all those Schools that offer pharmacology are seeing an increase in popularity.</p> <p>The British Pharmacological Society released in September 2017 a report by PwC about the employment and education landscape of pharmacology in the UK. First and foremost, the report shows that pharmacology as an academic subject is growing and is healthy (https://www.bps.ac.uk/news-events/news/society-news/articles/2017/pharmacology-education-and-employment-landscape-re)</p>
1.1.7	Does the proposal involve collaboration with another School within the University, or another provider external to the UEA?	<p>Yes</p> <p>In year zero, PHA will run the 20 credit "Foundations in Pharmacology and Drug Discovery Module", CHE will run the two modules (CHE 3004A, CHE-3003B), BIO will run two (BIO-3002A, BIO-3001B) and either of two maths course (CHE-3005A and MTHB3001A) will form the last optional 20 credits. This is the standard format for SCI foundation year for Pharmacy courses.</p>
1.1.8	Will the programme require accreditation from a professional, statutory or regulatory body?	No
1.1.9	Will there be any impact on existing teaching patterns, and will any new modules be required or existing modules changed. If so please detail?	Yes, the course will consist of one new module, the 20 credit "Introduction to Pharmacology and Drug Discovery". The course will mirror the Introduction to Pharmacy Skills" module, consisting of medicinal chemistry and pharmaceuticals content but replacing the pharmacy practice elements with pharmacology.

1.1.10	Outline any key features of the programme and any associated resource implications	Current pharmacology members of staff will be teaching the aspects of the new module while the rest is taught by current pharmaceuticals and medicinal chemistry lecturers so there are no extra resource implications. The rest of the course will be co-taught with all the other foundation year students so there are no other resource implications.
1.1.11	Will any existing degree programmes be affected by this course proposal e.g. change in title, pathways changed, merged or closed? If so please detail.	No

Head of School Support/Authorisation	
Professor Mark Searcey Head of School name and signature	Date 10 th October 2017

On completion of the above, please forward to **Senior Faculty Manager**

Office Use Only – For completion by Associate Dean L&T in consultation LTS Coordinator (who supports the school) and Associate Dean -Admissions Please refer to the table on Page 1 to assign a risk category and indicate agreed category below

Risk category 1 (low risk)	X	Risk category 2 (standard risk)	
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For risk category 1 only CP4 (Academic Design) required **Y**. If **Y**, please detail which sections need to be completed. If **N**, proceed directly to completion of CP5 (Notification of Approval and set up – for LTS use only)

Associate Dean (Learning & Teaching) to decide if a completed CP4 form is required, and if so, what sections require completion.

Associate Dean (Admissions) Support/Authorisation

Dr Stephen Laycock,  Associate Dean (Admissions) name and signature	16/10/17 Date
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Additional comments from Associate Dean (Admissions) **in consultation with ARM.**

I do agree it has the potential to increase WP. I think this will help admissions by providing a clear route for PDD students who require a foundation year. I have consulted with ARM and they felt it was low risk.

Associate Dean (Learning & Teaching) Support/Authorisation

Dr Ben Milner Associate Dean (Learning & Teaching) name and signature	17 th October 2017 Date
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For risk categories 2 only. Upon completion of Business Plan (CP2) and Financial Plan (CP3):

Office Use Only – For completion by Senior Faculty Manager, in consultation with ARM Executive and Faculty Executive

Comments and recommendations from **ARM Executive**, made to Faculty Executives upon full proposal made.

Comments and recommendations from SFM, made to Faculty Executives upon proposal made.	
Senior Faculty Manager name and signature	Date
Where applicable, comments made by the Faculty Executive on the proposal	
Approved by Faculty Executive (Yes, No, N/A)	Date

Proposed outline for new BSc in Pharmacology and Drug Discovery with Foundation Year

Code	Title	Period	Comments
Compulsory Modules			
CHE-3004A	Introductory Chemistry	Semester 1, 20 credits	No changes to module
CHE-3003B	Further Chemistry	Semester 2, 20 credits	No changes to module
BIO-3002A	Introductory Biology	Semester 1, 20 credits	No changes to module
BIO-3001B	Further Biology	Semester 2, 20 credits	No changes to module
TBA	Introduction to Pharmacology and Drug Discovery	Year, 20 credits	New module
Options Range A			
CHE-3005A	Introductory Mathematics for Scientists	Semester 1, 20 credits	No changes to module
MTHB3001A	Mathematics I	Semester 1, 20 credits	No changes to module

Course Proposal – Stage 3 Academic Design (CP4)



Instructions for completion are integrated into the form, in green. When completing the form, please remove this text and complete the form in black ink.

Summary

The Academic Design (CP4) is completed for all standard risk (Category 2) proposals, and, for low risk proposals, some parts of the form will need to be completed if the academic content is changing (These will be identified on the CP1).

It consists of three parts:

Part 1 is the Programme Specification, which will be published on the LTS website post approval. Please note that the Course Profile is now a link to the Admissions course pages, which will be set up after approval.

Part 2 is additional information regarding the academic content of the programme which will help inform the approval decision by the bodies considering the academic case. This includes details of the modules forming the academic content of the course.

Part 3 is the log of considerations and sign-off/approval by the relevant executives/committees.

Basic instructions for completion are integrated into the form, in green. When completing the form, please remove this text and complete the form in black ink.

These guidance notes aim to give roleholders more detail of the process of completion and what is expected at each stage.

Completion of the Form

The form should be completed by the Academic Lead with support and advice from the LTS Coordinator supporting the School.

1. Part 1, the Programme Specification, should be straightforward to complete for standard courses. The Coordinator can advise on the regulations (for sections 4.1.5 to 4.1.12). If a new award is required, this should be flagged to the Finance, Governance and Planning Office at an early stage.
2. If the course is a variation of a current course, or is part of the same group, and they will share a Programme Specification, the LTS Coordinator will join this up at the CP5 stage.
3. The Course Profile will not be required for Part 1 – after approval, this will be available on the Admissions pages, and internally through eVision.

4. The Programme Specification includes information on the Board of Examiners and placement information (including a period of study abroad), however, further details will be required to help inform the approval consideration. These should be recorded in Part 2.
5. Part 2, the additional information required to consider approval, should be completed by the Lead Academic. The LTS team (normally the Team Leader) can help with section 4.2.1, the Course Profile, and can advise on timetabling and defined choice constraints if necessary. The Lead Academic should discuss the inclusion of modules from other Schools with the appropriate Teaching Director, and agree any slotting requirements, pre-requisites, cap on numbers etc.
6. The LTS Coordinator/Team Leader should check with the Lead Academic that:
 - a. There is an even spread of modules across the academic year;
 - b. It is clear which modules can and which cannot clash;
 - c. Where relevant, other Schools are aware and support the inclusion of their modules in the Course Profile and that there are no restrictions.
 - d. Where new modules are being proposed, a completed Module Outline is included, or hyperlinked to. The Team Leader can provide a new code when approval for the module has been given.
 - e. Section 4.2.7 provides details of any placement, having discussed the requirements with the Study Abroad Office (for periods of study abroad), Local Support and Careers Service (For year in industry) or LTS Placements (For professional placements).
 - f. There is no need for further consultation at this stage, unless it has been expressly raised as a condition in the approval of CP2/3. Check CP2/3 to ensure that there is no outstanding issues to resolve, and all parts are complete (this should have been checked/resolved by the School Manager at Stage 2, so this is a safety check; nothing should be going to LTC with missing or unresolved issues).
7. Once parts 1 and 2 are complete the LTS Coordinator supporting the School should ensure that the CP4 is completed appropriately, that 4.3.1 is completed, and then forwards it, along with CP1, 2 and 3, to the secretary to the FLTQC for its consideration.
8. The secretary to FLTQC forwards the approved case to the secretary of LTC for final consideration and approval.
9. Following approval, the secretary to LTC notifies the secretary to FLTQC, who starts off the completion of CP5 before passing all the documents to the Student Records Office for setting up the course on the system and keeping the master copy of the documents for the approved course.

CP4 Part 1 - PROGRAMME SPECIFICATION for an award of the University of East Anglia						
4.1.0	Reference Code	CP PHA101017				
4.1.1	Title	BSc in Pharmacology and Drug Discovery with Foundation Year				
4.1.2	School (s)	PHA				
4.1.3	Faculty	SCI				
4.1.4	Date of first student intake	09/2019				
4.1.5	Award	BSc				
4.1.6	Interim Award/ degree title	Standard	Certificate of Higher Education and Diploma of Higher Education (UG); Postgraduate Certificate or Postgraduate Diploma (PG).			X
		Non- standard (detail)				
4.1.7	Level	Level 6 FHEQ (Bachelors)				X
		Level 7 FHEQ (Masters/Integrated Masters)				
		Other (specify)				
4.1.8	Award Regulatory Framework	Bachelors and Integrated Masters				
		Common Masters Framework				
		Other (specify)				
4.1.9	Course-specific regulatory requirements	None				
4.1.10	Length of course	Four				
4.1.11	Board of Examiners	Pharmacy				
4.1.12	Mode of Attendance	Full-time	X	Part-time	Other	Provide detail if 'other'
4.1.13	Professional Accreditation details	None				
4.1.14	Placement information	Indicate type of placement(s) offered (or 'none'). Further details of any placements should be provided in section 4.2.8.				
		Professional placement				
		Year Abroad				
		Year in Industry				
		Semester Abroad				

		Other	
		None	X
4.1.15	Relevant Subject Benchmark	Biosciences http://www.qaa.ac.uk/en/Publications/Documents/Subject-benchmark-statement-Biosciences.pdf	
4.1.16	Course Description	This is a variant of the current BSc in Pharmacology and Drug Discovery (PDD) that begins with a foundation year. One module (20 credits) of the foundation year will be a bespoke course for the students on this module (Introduction to Pharmacology and Drug Discovery). Otherwise students will take the Chemistry, Biology and Maths modules of the current SCI-based foundation year offerings. Students who pass the year will progress onto the BSc PDD.	
4.1.17	Course Profile details	Details of all courses currently offered by the University are available at https://www.uea.ac.uk/study/undergraduate/degrees and https://www.uea.ac.uk/study/postgraduate/taught-degrees	
4.1.18	Learning Outcomes	<p>The teaching programme is designed to meet the core biomedical sciences requirements and Pharmacology-specific requirements within the QAA Benchmark Statement for Biomedical sciences (see attached).</p> <p>In addition, it is designed to exceed the core knowledge required for a pharmacology degree as outlined in the BPS benchmark core curriculum, as the course also includes a significant element of drug discovery to prepare students better for the pharmaceutical industry. (See attached)</p>	
4.1.19	Graduate Attributes and Employability Skills	Having successfully completed the BSc in Pharmacology and Drug Discovery with Foundation Year, graduates will meet the core skills including experimental techniques, data handling and analysis, working practices, transferable skills and core attributes as laid out in the two benchmarking statements (See attached)	
4.1.20	Assessment and Feedback Strategy	<p>In addition to course tests and end-of-year exams, summative assessments include individual-based and group-based coursework, lab-report writing, oral presentations, written assignments, videos, reports etc.</p> <p>The course will use formative assessments throughout the years to drive student learning. Formative work includes lab reports, workshop question papers and mock exams. Various modes of assessment will be used on different modules, with generally a higher percentage of value associated with exams and course test than with coursework, but this cannot be generalised across the degree. Regular feedback will be provided to students both orally</p>	

		and written. Feedback will be provided both on an individual and a group basis.
4.1.21	Additional course-specific costs that students should expect to meet	None
For Office Use:		
4.1.22	Log of annual review - Version and date of production/revision	The Programme Spec should be reviewed annually and the review logged here: <ol style="list-style-type: none"> 1) If there is no change, no new version is required. 2) If there are any changes, the version number should be incremented, and a summary of the changes recorded here. This should include a summary of any course profile changes.
Example	7/11/16	V1, new course proposal
	Jan 2017	Reviewed, no change
	Jan 18	Reviewed, changes to accreditation details and course profile (options in Year 3).
4.1.23	Last active academic year	To be completed if course is discontinued
4.1.24	Date archived	To be completed if course is discontinued

CP4 Part 2 - Additional information required to consider approval						
4.2.1	Course Profile					
Set out the structure of the course, by Stage and Module Range (Compulsory, Option Range A, B etc). For each option range include the min/max credits to be taken along with any required combination of modules, if necessary.						
Stage	Module Range	Module Code	Module Title	Credits	Period	Timetabling info/slot
0	Compulsory	CHE 3004A	Introductory Chemistry	20	SEM1	U
0	Compulsory	CHE 3003B	Further Chemistry	20	SEM2	U
0	Compulsory	BIO 3002A	Introductory Biology	20	SEM1	U
0	Compulsory	BIO 3001B	Further Biology	20	SEM2	U
0	Compulsory	New	Introduction to Pharmacology and Drug Discovery	20	SEM2	New
0	Optional	CHE 3005A	Introductory Mathematics for Scientists	20	SEM1	U
0	Optional	MTHB3001A	Mathematics I	20	SEM1	A1, B7, D8, A2/B6/D3/D4
4	Compulsory	PHAP4003Y	Life Sciences Chemistry	30	Year	D
4	Compulsory	PHAP4006Y	Cellular Pharmacology	30	Year	B
4	Compulsory	PHAP4007Y	Introduction to drug delivery and pharmacokinetics	20	Year	A
4	Compulsory	PHAP4008Y	Neuropharmacology	20	Year	U
4	Compulsory	NBS-4008Y	Introduction to business (2)	20	Year	EUG
5	Compulsory	PHAP5001Y	Drug design and mechanisms of action	30	Year	
5	Compulsory	PHAP5009Y	Applied immunology and infectious diseases	20	Year	
5	Compulsory	PHAP5010Y	Gastrointestinal diseases and cancer	20	Year	
5	Compulsory	PHAP5011Y	Cardiovascular and renal diseases	20	Year	
5	Compulsory	PHAP5012Y	Neuropharmacology – central nervous system	30	Year	
6	Compulsory	PHAP6014A	Research Project	50	SEM1	

6	Compulsory	PHAP601 5B	Advanced drug discovery, pharmacology and toxicology	30	SEM2	
6	Compulsory	PHAP601 6B	Special topics	20	SEM2	
6	Compulsory	NBS6018 Y	Project Management	20	Year	
4.2.2	New Modules	Introduction to Pharmacology and Drug Discovery				
4.2.3	External comment	This is a minor change to the current year 0 of the Foundation year and the rest of the course is exactly the same as the current foundation year in PHA and the BSc in Pharmacology and Drug Discovery. During the set up fo the PDD course, we consulted with external bodies including the British Pharmacological Society, Astra Zeneca and Novartis.				
4.2.4	Consultation with existing students	Obviously the amount of feedback that current PDD students can give is limited, however, a meeting was held with 1 st Year PDD BSc students on 2/11/17. They were generally supportive of a foundation year specifically for PDD students. It should be noted that during the last admissions cycle, we recruited some students to the Chemistry foundation year who would like to move to PDD next year. This is not a satisfactory arrangement either for CHE (who will therefore lose students) or PHA.				
4.2.5	Board of Examiners	No new examiners will be required.				
4.2.6	Cross-Schools delivery details	This will be delivered as for the other Foundation Year courses in the SCI faculty – the Biology aspects will be taught in BIO, the Chemistry and Maths aspects from CHE and the PDD course from PHA				
4.2.7	Additional learning resources	No additional resources will be required.				
4.2.8	Placement detail	There will be no placements in Year 0. These will begin when the students move into the BSc PDD course and will mirror those.				
4.2.9	Course Director	Mark Searcey				
4.2.10	Deputy Course Director	Not applicable				
For office use only – for completion by LTS Coordinator supporting the School						
LTS Coordinator's name, signature and date		Caroline Rose, 3 November 2017				

Part 3 - Approval of the academic case

	Name	Date of meeting/ decision
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4.3.1	School (Teaching Director on behalf of the Teaching Committee/Executive)	 Anja Mueller	03/11/2017
	Additional School approval (for cross-School delivered courses), if applicable		
4.3.2	Faculty (Associate Dean on behalf of the Faculty Learning, Teaching and Quality Committee)	Ben Milner	07/11/17
	Additional Faculty approval, if applicable		
4.3.3	University (PVC-Academic on behalf of the Learning and Teaching Committee – category 2)		
4.3.4	Comments Any comments regarding approval/refusal of approval to be documented here		