# School of Informatics Course Proposal Form (version: May 2021)

Please see Page 2 for instructions on which parts of this form to complete, whom to consult with to avoid unnecessary effort, and where to send the completed form.

Frank Mollica Date: 1/12/21 Proposer(s):

Cover page: Basic permanent course information
Unless otherwise noted, items in this section are entered into EUCLID and cannot be changed without creating an entirely new course.

| Course Name                                  | Seminar in Cognitive Modelling  |  |
|--|---|--|
| Is this an EPCC                              | X No (default) (If you don't know what EPCC is, this is the right choice.)  |  |
| course?                                      | Yes (If so, leave Course Acronym blank, to be filled in by ITO as EPCC/ <number></number>   |  |
|  | for Theon and our Sortable List.)   |  |
| Course Acronym (used only School-internally) | SCM   |  |
| SCQF Credit Level and                        | Standard options for Informatics courses:   |  |
| Normal Year Taken                            | Level 8/Year 1  |  |
|  | Level 8/Year 2  |  |
|  | Level 10/Year 3 (also available in Year 4). [In practice, most level 10 courses have many students in both UG3 and UG4. MSc students may take up to 20 credits at Level 10.]                    |  |
|  | Level 11/Year 4 (also available in Year 5 and MSc). [These courses are listed as options in both UG and MSc DPTs.]  |  |
|  | X Level 11/PG (also available in Year 5). [These courses are normally for MSc and UG5 students. They are not explicitly listed in UG4 DPTs, but UG4 students can take limited credits of them.] |  |
|  | Level 11/PG (only). [These courses are not available to UG4 or UG5 students.  Examples: CDT courses; CPD courses.]  |  |
|  | Other options. Please provide justification if using:   |  |
|  | Level 9/Year 3 [Deprecated except for compulsory UG3 courses. The course will   |  |
|  | not be available to other years.]   |  |
|  | Level 10/Year 4   |  |
|  | Other:  |  |
| SCQF Credit Points                           | 10 <u>X</u> _20406080Other:   |  |
| Delivery Location                            | X_CampusOn-line Distance Learning   |  |
| Course Type                                  | X Standard (default) Dissertation Online Distance Learning Placement Student Led Individually Created Course Year Abroad  |  |
| Marking Scheme                               | X Standard (numerical) Letter grade only Pass/Fail (Normally only for externally delivered courses)   |  |

### Guidance for remaining sections:

**Before starting your proposal:** please contact the DDoLT (Curriculum) informally before starting to complete this form, with at least the following information:

- Tentative course title, level, year, and number of credits
- Who the target audience is, and why the course is needed.

The DDoLT (Curriculum) or delegate will schedule a meeting with you to discuss your plans and whether a full course proposal makes sense. If so, you will be provided with further instructions.

Deadlines: New courses must be approved by the December BoS meeting to ensure allocation of teaching staff for the following academic year. Since it may require considerable discussion and iteration to prepare the proposal, you should contact the DDoLT (Curriculum) as early as possible, ideally in spring or summer, and you should plan on submitting your full proposal by November.

Submitting your proposal: When your proposal is complete, please submit to iss-bos@inf.ed.ac.uk.

#### Colour coding and item-by-item guidance:

Guidance is provided in italics for each item. Please also refer to the guidance for new course proposals at <a href="http://www.inf.ed.ac.uk/student-services/committees/board-of-studies/course-proposal-quidelines">http://www.inf.ed.ac.uk/student-services/committees/board-of-studies/course-proposal-quidelines</a>. Examples of previous course proposal submissions are available on the past meetings page <a href="http://web.inf.ed.ac.uk/infweb/admin/committees/bos/meetings-directory">http://web.inf.ed.ac.uk/infweb/admin/committees/bos/meetings-directory</a> but note that the proposal form was updated in Apr 2021.

Sections in gold are for student view and are required before a course can be entered into DRPS.

**Sections in orange** are for School use but are still required for all courses (even those that have already been approved based on other documentation).

**Section in gray** are for consideration by the Board of Studies. They are normally required for all new course proposals but may be omitted in some cases, with permission (e.g., for invited proposals).

#### Glossary of terms:

(D)DoLT: (Deputy) Director of Learning and Teaching.

**DRPS** (The <u>Degree Regulations and Programmes of Study</u>): Provides the University's official listing and descriptions of courses, degree programmes, and the regulations that govern them; updated annually in April. Course information in DRPS is considered a contract with students.

**DPT** (Degree Programme Table): Lays out the course requirements for each year of a degree. All UoE degrees have a DPT in the DRPS.

<u>Path</u>: A system that students use to help choose courses and view options in their DPT. The information feeds through from DRPS but has a more student-friendly interface (e.g., by highlighting courses that are not running or where the student hasn't satisfied prerequisites).

**SCQF** (The Scottish Credit Qualifications Framework): Lays out the requirements for courses at different levels and with different numbers of credits.

### 1. Course overview and case for support

Except as noted, all fields are required and will go into the DRPS (course catalogue) entry for students. Important: Text in DRPS is effectively a contract with students, so should not include details that are likely to change from year to year.

### Summary Description (for DRPS)

Provide a brief official description of the course, around 100 words. This should be student-friendly, as it is the part of the descriptor a student is most likely to read. If this course replaces another course, please say so in this summary.

This course provides students an opportunity to explore their choice of topic in cognitive science in depth while honing their science communication skills and broadly surveying the foundations of cognitive science. The course aims to expose students to a variety of cognitive models (e.g., connectionist, Bayesian, quantum models) and to discuss and evaluate competing models for similar problems. Students will be expected to present and critique classic and recent research articles from the cognitive modelling literature, chosen from a list provided by the instructor.

#### Contribution to curriculum; target audience and expected demand; consultation (for BoS only)

Why is this course needed and how does it relate to existing courses and degree programmes (including any prerequisite courses)?

This course is intended to replace IRR and merge with TCM, which has not been delivered since 2015/16. While IRR teaches valuable skills, this course would leverage the time spent in IRR to learn those skills on content specialized for Cognitive Science, ensuring that our graduates leave with cursory understanding of several subfields of cognitive science in addition to the skills in IRR and the advanced depth of knowledge they receive in the rest of the specialized courses on the DPT. In addition, they would recieive more instruction and practice reading current articles, critically assessing the theoretical adequacy of a given model, comparing strengths and weaknesses of different modelling approaches and doing science communication, which are core graduate attributes of the programs (or should be in the case of the MSc).

This course is being proposed as a part of the revision of Cognitive Science programs to pre-empt the university-wide curriculum review. As a mandatory course, it will contribute to our MSc students having a unique core set of specialized skills. It will also help with cohort building.

What is the target audience, in terms of background and interests, and what is the expected demand (class size) for the course? State what your estimate is based on: e.g. by referring to projects in an area, sizes of similar courses, employer demand, etc. A survey of students may be requested once the main descriptor information is ready.

Proposed as a new compulsory course for students on the MSc Cognitive Science but not to other Informatics MSc students (who do IRR). It will also be available to PPLS MSc students on the following degrees: Psychology of Language, Developmental Linguistics, Evolution of Language & Cognition, Mind, Language & Embodied Cognition; and to UG4/5 students whose DPT list this course.

TCM was high demand but stopped because staffing issues

|   | We would like to have a quota of ~40 students. The CogSci MSc brings in 20-25 students a year and we expect at least another 10+ from UGs (both from the CogSci BSc/MA and external) and MSc studets from PPLS. |
|---|---|
| Has this proposal been discussed        | X Yes   |
| with the DDoLT (Curriculum) or          | No  |
| DoLT prior to BoS submission?           |   |
| Who else has been consulted?            | Chris Lucas, Sharon Goldwater   |
| Proposals should typically be discussed |   |
| with relevant colleagues, including the |   |
| programme director (for MSc courses).   |   |
| Summarize their comments if needed.     |   |

### Course Description (for DRPS)

This student-facing description should normally include (a) a more in-depth description of the learning aims, nature and context of the course, (b) a rough outline of the content, and (c) a description of how the course will be taught, and how students are expected to enagae with it and to demonstrate their achievement of the learning outcomes.

Note: Please keep this section general enough to avoid the need for yearly updates, and keep in mind that you should have only around 15 lecture hours of examinable material per 10pts of a course. (10pt courses may have 18-20 lecture hours, but the rest should be used for guest lectures, revision sessions, assignment feedforward/feedback, etc.)

The first semester will focus on developing research skills (finding/reading/reviewing literature and science communication) while surveying foundational topics in cognitive science. The second semester will focus specifically on evaluating and presenting cognitive models. Each semester is split into two parts. In the first part, the instructor will provide introductory information and background material, as well as information on how to develop skills in reading scientific papers and presenting them. In the second part, students will present papers, chosen from a list provided by the instructor (or approved by the instructor). Topics covered by the instructor will include:

- How to read, analyse and present research papers in cognitive modelling
- Example presentation(s) of papers
- Introduction and overview of modelling approaches/philosophies
- Model comparison and evaluation methods

Topics available for students to present will vary depending on the instructor. Topics may include: analogical reasoning, animal cognition, attention, biological motion, categorization, causality, communication, concepts, development, ecological considerations of modelling, event cognition, inductive reasoning, judgment & decision making, language, learning, memory, meta-cognition, number cognition, object cognition, physical reasoning, perception, problem solving, rationality, social reasoning, spatial cognition, specialization, theory of mind, temporal cognition etc. For specific topics, see the course web page or contact the instructor directly.

### Assessment Weightings (for DRPS)

These should correspond approximately to the proportion of learning outcomes (below) that each component assesses. Note that assessed coursework is typically more time-consuming than exams for both students and staff. A typical course is based no more than 30% on coursework and doing so requires justification.

Written Exam \_\_\_0\_%
Practical Exam \_\_0\_\_% (for courses with programming exams)
Coursework \_\_100\_%

#### Additional Information, Assessment (for DRPS)

State briefly for students what type of coursework to expect, including whether implementation is required. E.g. "Coursework will involve implementing some of the methods discussed" or "The coursework will assess students' analysis and proof skills. No implementation is required." More specific information can be useful, but please keep it high level and do not include details that are likely to change from year to year.

Coursework will include a portfolio of weekly brief (<200 words), engagement responses to readings and in-class discussions (30%), an essay in first semester (40%) and an oral presentation in the second semester (30%). Students will also be required to make a presentation in the first semester and will be provided feedback.

### Learning Outcomes (MAXIMUM OF 5; for DRPS)

List the learning outcomes (LOs) of the course. These must be assessable (i.e., observable), so must specify what the student should be able to do concretely, not simply what they should "understand". Use concrete yerbs that indicate (a) what type of assessment would be appropriate, and (b) what level of knowledge/thinking is expected (from recall to analysis to novel creation). Example verbs: define, explain, implement, compare, justify. Assessments (described later) should be tied to the LOs.

LOs should focus more on the types of thinking/skills developed than on the detailed course content, and should be appropriate to the level of the course: e.g., LOs at Level 11 should include more higher-level thinking skills than at Level 8. See how to write good learning outcomes and the descriptors of the SCOF Levels. Also, please consider including LOs related to social or ethical implications or meta-skills as well as technically-focussed LOs.

On completion of this course, the student will be able to

- 1) Demonstrate understanding of a range of classic and current articles in cognitive science/modelling by summarizing and critiquing their central ideas and/or results.
- 2) Demonstrate understanding of the relationship between computational models and cognitive theories, by being able to critically assess the theoretical adequacy of a given model.
- 3) Compare and contrast the strengths and weaknesses of different models of the same behaviour.
- 4) Search the literature and synthesize information from several papers on the same topic and create a coherent oral presentation on that topic.
- 5) Communicate (written and oral) key findings in cognitive science/modelling to inter-disciplinary

#### Graduate Attributes, Personal & Professional Skills (for DRPS)

Please list the generic transferrable skills that this course will develop, as aligned with the <u>UoE's Graduate Attributes</u> framework. Examples from the four skills categories in the framework include:

Research and enquiry: problem-solving, critical/analytical thinking, handling ambiguity, knowledge integration Personal effectiveness: leadership, planning and organizing, flexibility and change management, entrepreneurship Personal responsibility and autonomy: ethics and social responsibility, independent learning, self-awareness and reflection, creativity, decision-making

Communication: interpersonal/teamwork skills; verbal, written, cross-cultural, or cross-disciplinary communication

critical/analytical thinking, knowledge integration and application, independent learning, creativity, interpersonal skills, verbal, written and cross-disciplinary commmunication



# Breakdown of Learning and Teaching Activities (for DRPS)

Please fill in the number of timetabled hours per student for each type of activity. Do not include non-timetabled hours.

# A typical 10pt Informatics course has:

- 18-20 lecture slots (2/wk), but only ~15h should be examinable lectures, with the rest used for guest lectures, revision sessions, assignment feedforward/ feedback, etc. If unsure of plans, count these under 'lecture hours' but please explain tentative plans in the free text below.
- No more than 4-5 lab or tutorial hours. Please consider whether fewer can be used, e.g. by using some lecture hours for wholeclass discussion/feedforward.

A typical 20pt course has 30 lecture slots (3/wk) and no more than 8 lab/tutorial hours.

| Timetabled<br>Hours | Туре   |
|---------------------|--|
| 5                   | Lecture Hours  |
| 27                  | Seminar/Tutorial Hours   |
| 0                   | Dissertation Project Supervision Hours                                       |
| 0                   | Supervised Lab/Workshop/Studio<br>Hours                                      |
| 0                   | Feedback/Feedforward hours   |
| 0                   | Summative assessment hours<br>[Normally 2h if using an exam;<br>otherwise 0] |
| 0                   | Revision Session Hours   |

(Note for ISS: Remaining hours should be allocated Directed and Undirected Learning Activities.)

## Use of timetabled activities (not to be included in DRPS)

If labs or tutorials are planned, please describe their role in the course (e.g., as support for assessed coursework, review of exercises, discussion of ethical questions, etc). If a non-standard pattern or style of lectures is planned, please explain.

The course is modelled after a US style seminar. Each semester will begin with lectures and then transition to student presentations and class discussions. There will be two timetabled activities per week (1.5h each) but students will be assigned to participate and write a brief response for only one of them. The lectures at the beginning of the term will be attended by all students. Attendance is only required at one student presentation per week but students will be attende both. Splitting the course like this allows students more opportunity to participate in discussion. Students are incentivized to show up because the response portfolio will require comments on the discussion.

#### Summative assessment and time spent on assignments (not to be included in DRPS)

Please describe your plans for summative assessment, in more detail than in the student-facing description: How many and what types of assessment are planned (oral presentation, report, programming, etc)? For each piece of assessment, please indicate (a) which learning outcome(s) it assesses; and (b) how many hours students are expected to spend on it.

Please minimize the time spent on summative assessments (for both students and markers) while robustly assessing the learning outcomes. See the <u>School policy on Workload and Assessment</u>, which places limits on the number of summative courseworks and time expectations: to ensure a 35-40h working week, we must limit time asked of students to 6-7h/wk in total per 10 credits, including contact hours, self-study, and coursework.

Weekly brief (<200 words) paper responses assess LOs 1-3. They should take no more than an hour each (but ideally much less). Students will be asked to summarise the main idea of the article (2-3 sentences), comment on whether or not they believe the conclusions (1-2 sentences) and justify

their belief (2-5 sentences). In class, they will also be asked to comment on the discussion and state if they revised their belief and why. They will be given the  $^{\sim}5$  minutes it should take to do this. The illocution of the portfolio is to ensure students show up prepared to engage in discussions.

Essay (5 page max) will assess LO 1,2 & 5. Should take 8-12 hours.

Oral presentation (45 min) will assess LO 1-5. Should take 8-12 hours

### Tentative plans for feedback/formative assessment (not to be included in DRPS)

Please describe your current plans for providing feedback to students: e.g. oral feedback during labs/tutorials, automarked solutions to in-lecture or online quizzes, peer feedback, etc. We also encourage submission of at least one piece of (individual or group) written work, with formative feedback emphasizing how students can improve

Some useful guides for planning effective and efficient feedback:

- Two short IAD web pages: <u>Five basic principles for feedback</u> and <u>Tips for improving feedback</u>

  <u>EngagED in... assessment and feedback</u>. This flyer from IAD discusses assessment **of, for,** and **as** learning, and includes examples of innovative approaches that could help both with scaling to large courses and with causing students to reflect on and become engaged with their own assessment.
- Considerable further reading is available at the <u>University pages on Enhant</u>

Brief paper responses will be incorporated into the discussion and feedback will be provided then. Additionally, written feedback will be provided on the portfolio once per semester. Students will also be given examples of good/bad responses from the outset so as to adjust their expectations.

The essay will receive written feedback.

In the first semester, the student/group will have an oral presentation and receive peer/instructor formative feedback directly after the presentation. The group will also be provided with instructors written comments wrt the rubric. In the second semester, the students/group will just receive the written comments wrt the rubric.

### Decolonisation and Inclusivity (not to be included in DRPS)

What actions are you taking towards making your course inclusive for all students, in terms of both content and delivery? Please be as specific as possible. If you are not taking any action, please justify. See suggestions and auidance here.

Content: The course will highlight contributions from a diverse set of researchers across the cognitive sciences. The suggested topics and readings will span different cultures, geographic regions, viewpoints and times. Students will also be allowed to bring forward their own readings and diversity will be encouraged. Lastly, student will be taught how to make their presentations and ideas accessible to diverse stakeholders.

Delivery: Inclusivity is vital to the success of this kind of seminar course. Every student will be expected to contribute both by presenting papers and by taking part in discussion following presentations. Active learning is built into the course. The first two weeks of lectures will include exercises modelling behavior and expectations for participation and feedback. Further, course  $materials\ will\ be\ prepared\ with\ accessibility\ in\ mind.\ Lastly,\ our\ assessment\ will\ be\ framed\ in\ terms$ of real world applications following the purpose, task, criteria framework. Students will also receive formative feedback before summative assessment.

Anticipated Resource Requirements

| If tutorials are needed, how many students per No tutorials               |                     |
|---|---------------------|
| tutors? (Please provide your desired number, and                          |                     |
| the maximum feasible number.)   |                     |
| If labs are needed, how many students per No labs                         |                     |
| demonstrator? (Please provide your desired                                |                     |
| number, and the maximum feasible number.)                                 |                     |
| Please estimate the number of hours required 2 hours / student            |                     |
| for marking, per student.   |                     |
| If any other teaching support resource will be                            |                     |
| requested in order to develop or maintain the                             |                     |
| course, please provide an estimate of that here.                          |                     |
| Do you anticipate any difficulty recruiting Possibly.                     |                     |
| enough teaching support? (For example if the                              |                     |
| course is very large or very specialized.)                                |                     |
| Does the course have any scaling limits due to As the course is a seminal | r, it doesn't scale |
| available space or equipment? greater than 50 students.                   | . Ideally ~30       |
| If equipment is required, please state how it will N/A                    |                     |
| be procured and maintained.   |                     |
| Does the course have any external funding? N/A                            |                     |
| (Typically only for CPD courses)  |                     |
| Does the course need any special arrangements Quota: 40                   |                     |
| such as quotas, agreements with other schools,                            |                     |
| or registration arrangements? Does it have any                            |                     |
| atypical characteristics that may affect finance                          |                     |
| or student registration? Please specify if so.                            |                     |

### 3. Further information for BoS consideration

A full proposal for a new course must include examples of exercises and assessment. Please provide these below, along with publicity information.

### Course information and publicity

The course web page (typically the Learn landing page) will be linked from the Sortable Course List, and information such as timetables and assignment deadlines must be made available prior to the start of the academic year. Please specify here if any additional info/publicity is needed for your course, especially if it is aimed largely at non-Sol students.

The course will be on the DPT as optional for a few MSc programs in PPLS. We should keep them in the loop to any changes.

# Sample tutorial/lab sheet questions

Provide a list of tutorial questions and answers and/or samples of lab sheets. These need not be fully fleshed out but should indicate what sort of exercises will be provided to help students learn the material.

#### N/A

### Sample assessment materials

If the course is primarily assessed by exam, provide a sample exam question with model answers. The online list of past exam gapers gives an idea of typical and alternative exam formats.

If the course is largely or primarily assessed by coursework, provide a sketch of a possible assignment with an estimate of effort against each sub-task and a description of marking criteria.

#### attached

### Any other relevant materials

Include anything else that is relevant, possibly in the form of links. If you do not want to specify a set of concrete readings for the official course descriptor, please list examples here.

# 4. Additional Course Details for DRPS

Except where otherwise noted, these fields are required for entry into EUCLID and will be visible to students in the DRPS entry.

| Planned Academic Year of Delivery<br>(The first year you anticipate the course running,<br>e.g. AY 2019-20)   | AY 2022-2023   |
|---|--|
| <b>Keywords</b> Give a list of searchable keywords for the course.  | Cognitive science, cognitive modelling, science communication  |
| Course Organiser<br>(By default, the course proposer)   | Frank Mollica  |
| Intended Delivery Period  | Semester1Semester 2X_Full YearSummerOther (please specify):  |
| Timetable considerations/conflicts For School use. Please specify any constraints to be considered (e.g. overlap of popular combinations, other specialism courses, external courses etc). Include whether the semester delivery is constrained or could be flexible.   | Student will be on the CogSci MSc so this course should not conflict with the core cogsci courses: CCS, IPP, ANLP, NLU+, HCI, THF, CCN, Speech Processing (PPLS), ASR, Simulating Language (PPLS). Also likely MLP, IAML, Natural Computing. |
| Reading List/Learning Resources (for DRPS) You are encouraged to create resource lists using LEGANTO  |  |
| Feedback Information Provide a high-level description of how and what type of feedback will be provided to students, for inclusion in DRPS.   | Written feedback on essays and portfolio.<br>Verbal feedback on presentations.   |
| Is this course available to visiting students?  | X_Yes (default)No  If no, please provide a justification here:   |
| Required pre-requisite courses Use sparingly: these are enforced in PATH and can only be waived by approval from the School's Curriculum Approval Officer. Note that cross-year required pre-requisites may prevent MSc students from registering; consider using recommended pre-requisites or "other requirements" instead. | X_No<br>Yes (please specify full course name(s) and code(s)):  |

| Recommended pre-requisite courses  | NoX_Yes (please specify full course name(s) and code(s)):  Computational Cognitive Science (INFR10054)   |
|--|--|
| Required co-requisite courses Specify any courses that must be taken in parallel with the existing course. Note that this leads to a timetabling constraint that should be mentioned elsewhere in the proposal.  |  |
| Prohibited Combinations Specify any courses that may not be taken in combination with the proposed course].  | NoX_Yes (please specify full course name(s) and code(s)): Informatics Research Review (INFR11136)  |
| Other Requirements/Additional Information This information is often used by MSc students and students from other Schools to see if they have appropriate background without having done our School's courses. So please avoid course titles, instead list specific knowledge and skills (such as mathematical concepts, programming ability or specific languages, etc).  Also list any other constraints on registration, for example: "Only available to 4th Year Informatics students including those on joint degrees." or "This course is open to all Informatics students including those on joint degrees, and to students in the School of Mathematics. Other external students whose DPT does not list this course should seek permission from the course organiser." | NoX_Yes (please specify):  The course assumes knowledge of cognitive science and, by the second semester, knowledge of linear algebra (vectors/matrix multiplication, orthogonality, eigenvectors), probability theory (discrete and continuous univariate random variables, expectations, Bayes rule), statistics (linear/logistic regression) and model evaluation as would be acquired in Computational Cognitive Science.  Data visualization and programming experience will be useful but there is no required programming.  This course is only open to students in Informatics and PPLS whose DPT lists this course. |
| Visiting Student Pre-requisites  | X_Same as "other requirements" Different than "other requirements" (please specify):   |

# 5. Placement in degree programme tables: for level 9-11 courses only (except EPCC)

This section is for consideration by the Board of Studies and will be used later by ITO to determine where the course will be added to existing degree programme tables.

|   | NoX_Yes (please specify and provide justification):   |
|---|---|
|   | The course is restricted to students on the following degrees whose DPTs will list the course:  |
|   | Compulsory course for MSc Cognitive Science: This course will replace IRR in the DPT (as agreed with Programme Director).   |
|   | Optional course for CDT in NLP: This course should be added to the collection of "Foundational Courses in Natural Language Processing" that the CDT students can select from in Y1 and Y2 (as agreed with Programme Director).  |
| Is this course restricted to students on a specific degree? E.g., some courses are only available to students on a specific CDT or MSc. | Optional course for BSc Cognitive Science (year 4): we will incorporate this change into DPT updates that will be submitted to the next BoS.  |
|   | Optional course for these PPLS MSc degrees, as agreed with the programme directors:  Psychology of Language Developmental Linguistics Evolution of Language & Cognition Mind, Language & Embodied Cognition   |
|   | The goal is to build a Cognitive Science cohort which requires a small size. We think it is likely that the course will reach its quota with the students listed above, but if not we will also consider permitting PPLS UG4 students on the MA Cognitive Science, in future years. |
| Is this course compulsory for students on any degree(s)?  | NoX_Yes (please specify and provide justification):  MSc Cognitive Science – to provide cohort experience and to standardize the graduate attributes of the specialized   |
|   | degree. It will replace IRR in their DPT.   |

| Any issues for part-time students?  |   |     |
|---|---|-----|
| Normally, part-time students have access to the same courses as full-time students on the equivalent degree. If you anticipate any problems with this, please specify here. | Normally, part-time students have access to the same courses as full-time students on the equivalent degree. If you anticipate any problems | No. |

# For optional courses:

If this course is available but non-compulsory for students on various degrees (most courses), please fill in this section. The choices here determine where the course appears in degree programme tables (DPTs) and the 2-3 character tags are displayed in the Informatics sortable course list.

This course should have NO TAGS because it is not available to most degrees. We will provide updates to the DPTs for MSc and BSc in Cognitive Science at the next BoS meeting to include this course.

| Should this course be tagged as 'ML' (machine learning foundations and methods)?  Courses with the ML tag are typically very high-demand and most degrees limit the number of ML credits. If your course might appeal to a similar audience but draw off students from these large courses, please select 'no' and choose one of the tags below. | No<br>Yes   |
|--|---|
| If you chose 'no', please choose at least one of the following tags Ideally, select exactly one, unless there is a good argument for more than one. These three are used in various combinations for many of our degrees.  | FSS (CS foundations, systems, and software)AIA (artificial intelligence applications and paradigms)COG (cognitive science: including HCI and NLP courses, but not most other AI courses. Please restrict to courses most relevant to natural cognition.)  |
| and also tick if any of the following tags or categories apply.  Do not tick any of these if you selected 'ML' already.  | SE (software engineering: including courses that are highly relevant to SE degrees. All SE courses should also be FSS. This tag is mainly relevant for UG SE degrees.)Databases and data management systems (used for Data Science MSc and MSc(R))Unstructured data and applications (used for Data Science MSc and MSc(R))Level 11 Security courses (used for Security MSc)ATFC Optional courses (used for ATFC MSc) |
| If you are not sure which tags are most appropriate or have other questions about this section, please note any comments/issues here.  |   |

