

Performance Development Review (PDR) Policy

School of Mathematics and Physics

1. Purpose and procedure

1.1 Purpose and scope

The Performance Development Review (PDR) is a structured process designed to evaluate achievements, skills, and areas for improvement of an academic staff member. It serves as an opportunity for constructive feedback, professional growth, and planning future development strategies.

The PDR comprises two key components: (1) evaluation and (2) development. This document specifically addresses the evaluation aspect in the School of Mathematics and Physics, which will be carried out by departmental committees. The development component of the PDR will be conducted separately by the Head of Department (HoD). The performance of all staff will be evaluated in two or three categories, with each category being reviewed by the respective departmental review committee:

1. Research and Impact: Contributions to research, publications, grants, collaborations, PhD supervision, and the societal or academic impact of their research (research-teaching track).
2. Learning and Teaching: Quality of teaching, curriculum development, student engagement, and the use of innovative teaching practices (research-teaching track and teaching-only track).
3. Service: Contributions to department, school, university, such as administrative roles, module leadership, programme/module development, outreach activities, and committee work (research-teaching track and teaching-only track).

Academic staff at higher levels are expected to take on greater responsibilities, and are expected to demonstrate higher performance. For example, in order to get the same PDR rating, an Associate Professor is expected to achieve a higher performance in Research and Impact, Learning and Teaching, and Service, compared to an Assistant Professor.

Each achievement can only be reported in one category (Research and Impact, Learning and Teaching, or Service). No items can be claimed in more than one category.

The PDR review period is one academic year (from 1 September to 31 August).

This policy does not apply to HoDs, Deputy Deans, Associate Deans, Dean, professional service staff, and laboratory assistants.

This policy should be read in conjunction with the relevant sections of the XJTLU Staff Handbook and the instructions provided by the XJTLU Human Resources Office. In cases where this policy conflicts with a university-level policy, the higher-level policy supersedes.

1.2 Work allocation for academic staff

The work allocation for staff on the research-teaching track is:

- 40% Research and Impact
- 40% Learning and Teaching
- 20% Service

The work allocation for staff on the teaching-only track is:

- 80% Learning and Teaching
- 20% Service

1.3 PDR Review Procedure

1. Each department identifies the chairs and members of the PDR review committees.
2. Each academic staff uploads the PDR review form with attachments (see Section 5) as one single PDF file in PDR self-assessment form of the X-HR system.
3. Departmental PDR review committees meet and evaluate all members of the department. Committee chairs send their evaluations to the HoD.
4. HoD collects evaluations of all members of the department, and provides these to the school PDR review panel.
5. School PDR review panel evaluates all members of the school, and sends recommendations to the university panel.
6. University PDR panel evaluates and makes the final decision.
7. PDR outcomes will be made available to all members of the school.

1.4 Departmental PDR Review Committees

The selection of the committee members and committee chair is done at the departmental level. Each PDR Review Committee consists of five regular members (which includes the committee chair) and one rotating member. The rotating member will act as a substitute only in cases where a regular member has a conflict of interest.

Committee members and chairs serve for a term of one PDR period.

If a committee member has a conflict of interest, the rotating member will replace the conflicted member (which could be the committee chair) for that specific review. Committee members are not allowed to review their own PDR.

PDR reviewers are responsible for:

- Ensuring that evaluations are fair, consistent, and evidence-based;
- Considering the reviewee's workload and other responsibilities;
- Recognizing under-achieving staff and recognizing exceptional achievements.

If a committee member engages in unethical behavior, the school will take appropriate disciplinary action.

1.5 PDR Review Process

The chair of each departmental PDR review committee organizes the reviews.

Each committee member assigns a score to the reviewee in their respective category. Each individual score must be an integer from the set {1, 2, 3, 4, 5}. The lowest score is 1 and the highest score is 5. Committee

members may also provide written comments to explain or elaborate on their evaluations. When an individual score is 1 or 5, then the committee member must provide a substantiated motivation.

After committee members have submitted their individual evaluations, the committee chair sends the following information to the HoD:

1. The score and comments provided by each committee member, for each reviewee.
2. The average score for each reviewee, and comments from the committee chair.

The HoD calculates the score for each staff by combining the scores from the committees, weighted by the work allocation. The HoD then submits all materials to the school.

The school review panel reviews the documents provided by the staff, and the information provided by the committee chairs. The school review panel will make recommendations for the PDR of each staff, i.e., one of the following.

- Below Expectations
- Consistent with Expectations
- Excellent
- Outstanding

The school review panel may decide to give an overall evaluation of Below Expectations in the following cases:

- For staff on the research-teaching track: when one or more of the individual evaluations for (i) Research and Impact, (ii) Learning and Teaching and (iii) Service is Below Expectations.
- For staff on the teaching-only track: when one or more of the individual evaluations for (i) Learning and Teaching and (ii) Service is Below Expectations.
- In any other case when the school review panel considers the overall performance as Below Expectations.

1.6 Announcement of the PDR outcomes and appeals procedure

After the school review panel meeting, academic staff members in the school will be provided the following information:

1. Individual scores by committee members of each review committee, for each staff member. The reviewer names will be anonymized.
2. Preliminary PDR rating by the school review panel.

Staff who dispute their preliminary PDR rating can appeal. This appeal must be made by email, with full justification. This email must be sent to the school dean, with the HoD in the CC. The appeal must be made within 48 hours after the staff member receives the information mentioned above. These cases will be reviewed and evaluated by the School Senior Management Team. Staff should be aware that there is a possibility that the final rating could be lower after review, in particular if any new evidence is discovered.

The school review panel submits the final recommendations to the university review panel, where the final decision will be made.

After the PDR ratings have been approved at the university level, the final PDR ratings of all staff will be announced to all staff in the school. Appeals against the final results are possible, but the appeal must be made to the university.

2. PDR evaluation – Research and Impact

2.1 Scope

This evaluation aims to recognize and assess contributions to research outputs, PhD student supervision, external recognition, research funding, industrial collaboration, and the broader impact of research.

Academic staff members on the Research-Teaching track are expected to be research active, as defined in the “Research Active Policy” of the School of Mathematics and Physics.

All research output must be correctly included in PURE.

2.2 Research activities and achievements

Staff are required to submit a detailed summary of their research activities and achievements. The following information must be included:

2.2.1 Research Outputs

Staff must provide a list of published research outputs during the academic year.

- Research output includes: journal articles, conference proceedings, patents, books, book chapters, and similar outputs.
- Relevant bibliometric data must be included, such as
 - year of publication
 - title of the publication or patent
 - full author list (with staff's name highlighted)
 - the corresponding author
 - journal or conference name (for publications)
 - volume, issue, page, number of pages (if applicable)
 - publication status (“published”, “in press”, or “published online”)

For the PDR evaluation, only research output with the following conditions will be counted:

- Research output that is “published”, “in press” and “published online” during the PDR period (note that submitted articles and pre-prints in online archives are not counted)
- The first affiliation of the staff is XJTLU.
- The research is in the primary or secondary research area of the staff.
- The research output has not been used in previous PDR periods (for example, when it is “in press” in one year, and then “published” in the next year).

Staff must identify one representative publication for the year:

- Identify one representative publication that has been published during the PDR period. This publication will be evaluated on the quality and impact. Staff must list the contributions of each of the authors of the paper. Staff must explain the importance of the research findings.

2.2.2 PhD Student Supervision

Staff must provide detailed information about their PhD student supervision, including:

- Name of the student.
- Start date and (if applicable) end date.
- Current status of the student (e.g., pending, ongoing, completed).
- Role of the faculty member (e.g., principal supervisor, co-supervisor).
- Project title.

2.2.3 Research Funding

Staff must provide a detailed list of their research grants, including:

- Title of the grant.
- Role of the faculty member (e.g., principal investigator, co-investigator).
- Funding organization.
- Start and end dates.
- Total funding amount.
- Funding status (e.g., ongoing, approved, pending).

2.2.4 External Recognition

Staff may list achievements that demonstrate external recognition, including, but not limited to:

- External examiner for PhD theses.
- Grant evaluation panels or advisory boards.
- Awards, honors, or other forms of recognition for research contributions.

2.2.5 Industrial Collaboration

Staff may list achievements that demonstrate industrial collaboration, including, but not limited to:

- Partnerships or collaborations with industry.
- Joint research projects with industrial partners.
- Evidence of knowledge transfer or commercialization (e.g., patents, spin-offs, consultancy).
- Funding or resources secured through industrial partnerships.

2.2.6 Seminars and Conference Presentations

Staff must provide details of seminars and conference presentations in their primary or secondary research area, including:

- Date of the presentation.
- Location of the event.
- Title of the presentation.
- Name of the event or conference.
- Host organization.

2.2.7 Evidence of Impact

Staff may provide details on academic, societal, or economic impact of their research, including:

- Citation metrics (e.g., h-index, total citations).
- Commercialization of research (e.g., patents, spin-offs).

Staff must include supporting documentation where relevant (e.g., publications, grant award letters, media coverage, or testimonials).

2.3 Performance Rating Criteria

Staff performance in Research and Impact will be evaluated based on the following criteria:

- Research Outputs:
 - The quality, quantity, and significance of research outputs, as evidenced by the list of publications and the evaluation of the representative paper.
- PhD Student Supervision:
 - Successful supervision of PhD students to completion.
 - Evidence of effective mentoring and support for postgraduate research students.
- Research Funding:
 - Success in securing external research funding (e.g., grants, fellowships, industry partnerships).
 - Evidence of sustained effort in applying for competitive funding opportunities.
- External Recognition:
 - External examiner for PhD theses, grant evaluation panels or advisory boards, peer review conferences or funding agencies, awards or honors for research contributions, etc.
- Industrial Collaboration:
 - Active engagement with industry through collaborative research, consultancy, or knowledge transfer.
 - Contributions to commercialization or applied research that benefits industry or society.
- Seminars and Conference Presentations:
 - Active participation in academic events, including invited talks, keynote presentations, and conference contributions.
- Impact:
 - Societal, economic, or policy impact of research (e.g., influencing public policy, commercialization, public engagement).

2.4. Performance Rating Scale

Academic staff will be rated on a five-point scale for their Research and Impact contributions. Department PDR research panels may establish their own metrics for the above-mentioned criteria and the weighing scheme to make a recommendation on a scale from 1 to 5.

- Outstanding (5): Demonstrates exceptional contributions across multiple areas, such as high-quality research outputs, significant external funding, impactful leadership, and substantial societal or academic impact.
- Exceeds Expectations (4): Consistently exceeds expectations in terms of research quality, funding success, or impact, with evidence of leadership or significant contributions.
- Meets Expectations (3): Fulfills the expected range and quality of research activities, with evidence of regular contributions to research outputs, funding applications, and impact.
- Needs Improvement (2): Does not fully meet expectations; contributions are limited in scope,

quality, or alignment with institutional goals.

- Unsatisfactory (1): Fails to meet expectations; minimal or no evidence of meaningful research contributions. Academic staff does not satisfy the minimum criteria for being “research active”, as defined in the school policy.

3. PDR evaluation – Learning and Teaching

3.1 Scope

This component assesses contributions to module and programme development, teaching quality, student engagement, pedagogical innovation, and alignment with the university’s strategic goals. Academic staff are expected to demonstrate excellence in teaching, foster student success, and contribute to the continuous improvement of learning and teaching practice.

3.2. Teaching activities and achievements

To facilitate the evaluation of Learning and Teaching contributions, staff are required to submit a detailed summary of their teaching activities and achievements during the review period. The following information must be included:

3.2.1 Teaching Load and Student Feedback

A summary of the modules (excluding the Final Year Project (FYP) module and MSc dissertation modules), including:

- Module code name and credit weight
- Role (e.g., module leader or co-teacher)
- Number of groups taught and number of students in each group
- Total number of timetabled hours taught (excluding the hours delivered solely by TA).
- Additional contributions such as developing teaching materials, integrating AI tools, etc.
- Module questionnaire scores
- Reflection on feedback received and actions taken

3.2.2 Research-Led Teaching

- Integration of recent research findings into module content.
- Development of research-led teaching activities, such as case studies, projects, or seminars.
- Supervision of Final Year Projects (FYP), including number of students, project titles, weekly hours, format of supervision and outcomes.
- Supervision of MSc dissertations, including number of students, project titles, weekly hours, format of supervision and outcomes.
- Supervision of SURF (Summer Undergraduate Research Fund) projects, including project title, number of students, weekly hours, format of supervision and outcomes.

3.2.3 Laboratories (for Department of Physics)

- Development of new experiments or improvement of existing ones.
- Creation or revision of laboratory manuals and instructional materials.

- Supervision of laboratory sessions and mentoring of students during practical work.

3.2.4 Teaching Innovation

- Development of interactive or experiential learning activities;
- Implementation of inclusive teaching practices to support diverse learners.
- Publications/presentations at pedagogical journals/conferences.

3.2.5 Student Support and Mentoring

- Academic advising or mentoring of undergraduate and postgraduate students.
- Extra Support for student research projects (i.e., as a non-supervisor),.
- Organization of extracurricular activities to enhance student learning (e.g., seminars, competitions, field trips, etc.).

3.2.6 Teaching Grants

- Title
- Start and end dates
- Principal investigator and co-investigators
- Status (e.g., pending, approved, ongoing, completed)
- Amount of funding
- Description of how the grant supports teaching innovation or development.

3.2.7 Teaching Awards

- Name
- Awarding Organization
- Date of Award
- Description of the achievement or contribution recognized by the award.

3.2.8 Professional Development in Teaching

- Participation in teaching-related workshops, training sessions, or conferences.
- Completion of formal teaching qualifications or certifications (e.g., PGCert, HEA Fellowship).

3.3. Performance Rating Criteria

Performance in Learning and Teaching will be evaluated based on the following criteria:

- Teaching effectiveness:
 - Delivery with assigned loads and timetables
 - Improvement of current teaching materials
 - Provision of student feedback
 - Module Questionnaire results
- Research-led Teaching:
 - Integration of up-to-date research findings
 - Research-led teaching activities

- Supervision of FYP, Master Dissertation and/or SURF
- Laboratories
 - Contributions to the design, delivery, and improvement of physics laboratory sessions.
 - Development of laboratory manuals and instructional materials.
- Teaching innovation:
 - New teaching technique/platform
 - New ways of student engagement
 - Pedagogical research outputs
- Student support and mentoring:
 - Provision of academic advices to UG and PG students
 - Support on reference letters, research projects and extracurricular activities
- Teaching grants and awards
- Professional development

3.4 Performance Rating Scale

Academic staff will be rated on a five-point scale for their Learning and Teaching contributions:

- Outstanding (5): Demonstrates exceptional contributions across multiple areas, such as teaching effectiveness, teaching innovation, and student support, with evidence of significant impact on student learning and recognition from peers or external bodies.
- Exceeds Expectations (4): Consistently exceeds expectations in teaching quality, innovation, or mentoring, with evidence of leadership or significant contributions to the teaching community.
- Meets Expectations (3): Fulfills the expected range and quality of teaching activities, with evidence of effective teaching, module contributions, and student support.
- Needs Improvement (2): Barely meets expectations; contributions are limited in scope, quality, or alignment with university's strategic goals.
- Unsatisfactory (1): Fails to meet expectations.

4. PDR evaluation – Service

4.1 Definitions

The workload allocation model for academic staff includes 20% of their total workload for service activities. The three categories of service include:

(A) Core service to the Department/School/University:

All staff members are expected to contribute roughly equal time to this subcategory, as determined by the requirements of the department, school, or university. These tasks are typically assigned by the HoD or Dean. These include:

1. Module leadership
2. Administrative roles as defined in Section 4.3

(B) Additional service to the Departmental/School/University

These include other service roles in the department, the school, and the university, other than those in category (A).

(C) Service to the academic community and industry, which are linked to the mission of the school.

This includes activities not directly related to the administrative, operational, or strategic needs of the department, school, or university. Examples include editorial roles (e.g., journal editor, reviewer), professional society roles (e.g., leadership positions, organizing conferences), public engagement (e.g., public lectures), and other contributions. Evidence must be provided.

4.2. PDR Submission Requirements

For the PDR evaluation, staff must submit a detailed report of their service achievements., including significant achievements and/or outcomes.

4.3. Evaluation Criteria

Service duties in category (A) are evaluated using a points-based approach, as follows:

| Service duty (category A) | Points |
|---|--------------------|
| <u>Service – Module leadership</u> | |
| Module leader – module with 1 teaching group | 10 (per module) |
| Module leader – module with 2-3 teaching groups | 15 (per module) |
| Module leader – module with 4-6 teaching groups | 20 (per module) |
| Module leader – module with 7 or more teaching groups | 25 (per module) |
| Deputy Module leader - module with 7 or more teaching groups | 10 (per module) |
| | |
| <u>Service – Committee membership</u> | |
| Chair of University-level committee | 20 (per committee) |
| Member of University-level committee | 10 (per committee) |
| Chair of School-level committee | 10 (per committee) |
| Member of School-level committee | 5 (per committee) |
| Chair of Department-level committee | 5 (per committee) |
| Member of Department-level committee | 2 (per committee) |
| | |
| <u>Service – Learning and Teaching functions (for a full-year role) *</u> | |
| Associate director of postgraduate research students | 30 |
| Final year project coordinator | 30 |
| Master dissertation officer | 15 |
| Peer review officer | 10 |
| Programme director (if there is no deputy programme director) | 50 |
| Programme director (if there is a deputy programme director) | 35 |
| Deputy programme director | 15 |

| | |
|--|----|
| School assessment coordinator | 30 |
| Departmental Exam officer | 15 |
| School coordinator (ESS/XJTU/Year-1) | 10 |
| | |
| <u>Service – Research functions (for a full-year role) *</u> | |
| Departmental PGR (postgraduate research) officer | 15 |
| Departmental research officer | 10 |
| Departmental seminar organizer | 10 |
| Director of postgraduate research students | 30 |
| School ethics coordinator | 10 |
| | |
| <u>Service – Administrative functions (for a full-year role) *</u> | |
| Deputy Head of Department | 50 |
| Division head | 30 |
| Elected academic board member | 5 |
| Laboratory safety coordinator | 5 |
| Library liaison officer | 10 |
| School admission coordinator | 15 |
| School IT officer | 10 |
| School work placement officer | 10 |
| Timetabling officer | 10 |

*) The number of points should be adjusted to the timeframe in which the staff holds the role. For example, then staff is Departmental Officer only for three months in the year, then a quarter of the number of points is awarded.

Academic staff report their suggestions the number of points in Service categories (B) and (C) themselves, which will be reviewed and evaluated by the committee based on the details and achievements provided.

The review committee reserves the right to adjust the points in each of the Service categories.

The evaluation of service contributions will consider the following factors:

- Alignment with institutional needs: Contributions to the department/school/university will be assessed based on their alignment with the administrative, operational, and strategic priorities of the institution.
- Impact and quality: Contributions to the research community and public will be evaluated based on their impact, significance, and alignment with the staff member's expertise and professional standing.
- Time allocation: The estimated workload will be assessed for consistency with the expected workload allocation.

5. PDR form for academic staff

5.1. Staff details

Complete this form, and combine it into a single PDF with the following attachments:

1. All peer review reports for this academic year.
2. All module questionnaire reports for this academic year.
3. PDF of published version of representative research paper (only for staff on the research-teaching track)
4. Evidence of other achievements, such as award certificates (optional).

| | |
|---|---|
| Name | |
| Department | |
| Academic position (e.g., Associate Professor) | |
| Link to your PURE profile page Link to your Google Scholar page (optional) Link to your ORCID page (optional) Other links (optional) | |
| Special situations you wish to mention to the review committee (e.g., onboarding, illness, promotion, sabbatical leave). | |
| Signature | <p>I hereby declare that all the information provided is true, accurate, and complete to the best of my knowledge and belief. I understand that any false or misleading information may result in consequences.</p> <p>Name: _____</p> <p>Signature: _____</p> <p>Date: _____</p> |

5.2 Research

5.2.1 Research output

| Publication* | Type** |
|--------------|--------|
| | |
| | |
| | |
| | |
| | |

*) Title, full author list, year, volume, page, number of pages, journal, JCR ranking, DOI link. Only include research output that has already been **published**. Do not include preprints, submitted papers, etc.

**) journal article / conference proceeding / book / book chapter / patent / ...

5.2.2 Representative research paper

| | |
|--|--|
| Representative research paper (choose one from section 5.2.1) | |
| Who is the corresponding author of this paper? | |
| Explain the importance of this paper | |
| List the contributions of each of the authors to the paper | |

5.2.2 Research grants

| Research grant details* | Status** |
|-------------------------|----------|
| | |
| | |
| | |

*) amount (including currency), title, investigators, funding agency, funding programme, grant number, start/end dates

**) accepted / pending / rejected

5.2.3 Research awards

| Award details | Status* |
|---------------|---------|
| | |
| | |

*) accepted / pending / rejected

5.2.4 PhD students

| Name | Principal supervisor | Co-supervisors | Status* |
|------|----------------------|----------------|---------|
| | | | |
| | | | |
| | | | |

*) applying / ongoing / completed / suspended / withdrawn

5.2.5 Other research activities and achievements you wish to report (optional)

| Activity/achievement* | Details and achievements |
|-----------------------|--------------------------|
| | |
| | |
| | |

5.3 Teaching

5.3.1 Modules taught

| Module code, module title, semester | Credits | Lecture hours * | Students ** | MQ score |
|-------------------------------------|---------|-----------------|-------------|----------|
| | | | | |
| | | | | |
| | | | | |

*) one 5-credit module typically has $13 \times 4 = 52$ lecture hours. Exclude hours solely taught by TAs.

**) total number of students you taught

5.3.2 Undergraduate/Master student supervision

| FYP / MSc / SURF / ... | Student name | Programme* | Research project title |
|------------------------|--------------|------------|------------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

*) e.g., BSc Applied Mathematics / BSc Financial Mathematics / ...

5.3.3 Teaching grants

| Grant details* | Status** |
|----------------|----------|
| | |
| | |
| | |

*) amount (including currency), title, investigators, funding agency, funding programme, grant number, start/end dates

**) accepted / pending / rejected

5.3.4 Teaching awards

| Award | Status* |
|-------|---------|
| | |
| | |
| | |

*) accepted / pending / rejected

5.3.5 Other Learning and Teaching activities and achievements you wish to report (optional)

| Activity/achievement | Details and achievements |
|----------------------|--------------------------|
| | |
| | |
| | |

5.4 Service

Service category (A)

| Role | Points* | Details and achievements |
|-------------------------------|---------|--------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Total number of points | | |

*) Select from the table in Section 4.3.

Service category (B)

| Role | Points* | Details and achievements |
|-------------------------------|---------|--------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Total number of points | | |

*) Estimate the number of points, comparing the workload to those of the duties in Section 4.3.

Service category (C)

| Role | Points* | Details and achievements |
|-------------------------------|---------|--------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Total number of points | | |

*) Estimate the number of points, comparing the workload to those of the duties in Section 4.3.

6. PDR Review Form

| | |
|-------------------|--|
| Department | <input type="checkbox"/> Applied Mathematics <input type="checkbox"/> Financial and Actuarial Mathematics <input type="checkbox"/> Foundational Mathematics <input type="checkbox"/> Physics <input type="checkbox"/> Pure Mathematics |
| Review committee: | <input type="checkbox"/> Research and Impact <input type="checkbox"/> Learning and Teaching <input type="checkbox"/> Service |
| Reviewer name: | |

| | |
|--|--|
| Name of staff under review | |
| Academic position of staff under review | |
| Score | <input type="checkbox"/> 1 points (lowest score) <input type="checkbox"/> 2 points <input type="checkbox"/> 3 points <input type="checkbox"/> 4 points <input type="checkbox"/> 5 points (highest score) |
| Does the staff satisfy the school's criteria for being research-active? (only for research evaluation) | <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> not applicable |
| Comments Comments are optional when the score is 2, 3 or 4. A one-sentence motivation is mandatory when the score is 1 and when the score is 5. | |

Date: _____

Reviewer signature: _____

The panel chair must hand over these documents to the Head of Department, after the departmental review committee has concluded the evaluation process.

APPROVAL AND REVISION LOG

| Date | Approval | Description |
|--------------|----------|----------------|
| Sep 24, 2025 | SSMT | Policy created |