2021 Office of the Provost Teaching and Learning Grants

The Office of the Provost provides funding opportunities for faculty looking to integrate new educational methods and technologies into their classrooms and learning environments.

This request for proposals identifies innovative projects to design course modules, entire courses, or massive open online courses (MOOCs) and supports teaching initiatives at the department, programs, or school level. Proposals from all disciplines and subject areas are welcome, and awardees will develop projects over the next academic year. The deadline to submit proposals is **Monday, April 19, 2021, at 5:00 P.M.**

This grant program aims to measure the impact and effectiveness of these designs, pedagogies, and learning strategies, improve teaching (both online and face to face) and enhance Columbia University students' learning outcomes in all disciplines.

Awardees will receive in-kind support from the Center for Teaching and Learning (CTL), which could include course and project design, content development, training in new pedagogies, media production, assessment and evaluation, and project management. The Office of the Provost expects faculty who receive grants to spend awarded funds as proposed and to collaborate with the Center for Teaching and Learning (CTL) staff.

The CTL encourages all prospective grant applicants to schedule a consultation to develop the project plan and the appropriate in-kind support level. Please contact ColumbiaCTL@columbia.edu to schedule a meeting.

View the awardees of the Spring 2020 Provost's teaching and learning grants for the Innovative Course Design, Massive Open Online Courses (MOOCs), Large-Scale Teaching and Learning Grants, Innovative Course Module Design, and Interdisciplinary Teaching Awards.
Table of Contents

Summary of Funding Opportunities 3
Proposal Requirements and Checklist 4
Eligibility 5
Grant Types 6
  Innovative Course Design 6
  Innovative Course Module Design (Start Small!) 6
  Provost’s Interdisciplinary Teaching Awards (ITA) 7
  Large-Scale Teaching & Learning Grant 8
  Massive Open Online Courses (MOOCs) 9
  Emerging Technology Grant 9
Reporting 10
Submission Procedure 11
Deadline 11
Review Process 12
Notification 12
Information Sessions 12
Appendix: MOOC RFP 2021 Details 13
  Eligibility 13
  Proposal Requirements 13
## Summary of Funding Opportunities

<table>
<thead>
<tr>
<th>Grant</th>
<th>Purpose</th>
<th>Funding</th>
<th>For</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovative Course Design (full course; new or existing)</td>
<td>increase teaching effectiveness and student engagement through the creative use of a new pedagogical strategy and/or digital tools</td>
<td>up to $20,000 + in-kind CTL support</td>
<td>courses taught in: Fall 2021 Spring 2022 Summer 2022</td>
</tr>
<tr>
<td>Innovative Course Module Design (Start Small!)</td>
<td>support experimentation with a new pedagogical strategy or tool (not a full course redesign)</td>
<td>up to $2,000 + in-kind support from CTL</td>
<td>courses taught in: Fall 2021 Spring 2022 Summer 2022</td>
</tr>
<tr>
<td>Interdisciplinary Teaching Awards (ITAs)</td>
<td>support teams of two or more faculty from different departments or schools to work collaboratively on design and launch of innovative interdisciplinary courses</td>
<td>up to $20,000 + in-kind support from CTL</td>
<td>courses taught fall 2021 through summer 2022</td>
</tr>
<tr>
<td>Large-Scale for Departments, Programs, or Schools</td>
<td>support large-scale, coordinated efforts around teaching initiatives and exploration in a department, program, or school</td>
<td>up to $20,000 + in-kind support from CTL</td>
<td>2021 - 2022 academic year</td>
</tr>
<tr>
<td>Massive Open Online Courses (MOOCs)</td>
<td>reach global audiences, make more visible the teaching and research activities of the University while promoting public engagement</td>
<td>up to $25,000 + in-kind support from CTL</td>
<td>offered in 2022</td>
</tr>
<tr>
<td>Emerging Technology Grant</td>
<td>support experimentation with new pedagogical strategies using extended reality technologies (augmented/virtual reality, 3D scanning/printing)</td>
<td>up to $20,000 + in-kind support from CUIT</td>
<td>courses taught in: Fall 2021 Spring 2022 Summer 2022</td>
</tr>
</tbody>
</table>
Proposal Requirements and Checklist

Proposals (not to exceed 5 pages) should include:

- **Cover Sheet:** Include the name and affiliations of all PI(s), the title of the course or project, and school.
- **Course or Project Description:** Provide an overview of the course or project. Include intended audience, student enrollment figures and information on department support for the redesign of this course.
- **Rationale:** Write a strong, compelling rationale for the project.
- **Instructor Roles:** For Interdisciplinary Teaching Awards (ITAs) only, describe the area of expertise and the role each instructor will play in course design and implementation.
- **Outcomes:** Describe the existing or new course’s key learning outcomes or the expected outcomes for the project.
- **Project Activities:** Describe the course or project activities. Below are more guidelines on how to complete this section of the proposal if applying to the Innovative Course Design, Innovative Module Design, Interdisciplinary Teaching Awards, and Emerging Technology grants.
  - Describe the course design as it currently exists or the vision for a new course.
  - Specify which learning outcomes will be enhanced or improved through the course design or redesign.
  - Describe how the course design or redesign will structure the student learning experience through enhanced engagement with course materials, instructors, faculty, and other students.
  - Articulate how the course design or redesign aligns with theories and methods in teaching and learning.
  - If applicable, describe in-depth the technologies and/or media and how their inclusion will enhance student engagement and learning.
  - Describe course assessments or appropriate changes to the current assessments (e.g., assignments, exams, projects, problem sets, etc.) due to the course design or redesign.
- **Assessment/Evaluation Plan:** Describe a plan to measure the impact on student learning and the course or project outcomes and effectiveness.
- **Course/Project Sustainability:** For Interdisciplinary Teaching Awards (ITAs) and Large Scale grants, include a plan that describes how the course/project will be sustained after implementation.
- **In-kind Support Request:**
  - The CTL can offer support in learning design, assessment, project management, media production, and software development. The CTL encourages all
prospective grant applicants to schedule a consultation to develop the project plan and the appropriate in-kind support level. Please contact ColumbiaCTL@columbia.edu to schedule a meeting.

○ For the Emerging Technology grant, CUIT encourages all prospective grant applicants to schedule a consultation to develop the project plan. Contact etc-contact@columbia.edu to schedule a meeting.

- **Budget and Budget Justification:** Provide a detailed budget and budget justification for funds. Funds are available for course preparation, external course content, technology and media development costs, administrative costs, and teaching assistants/course assistants. For large scale projects, describe the anticipated supporting activities or materials in need of funding. Please mention all other sources of funding, if any.

- **Implementation Timeline:** For Interdisciplinary Teaching Awards (ITAs) only, include a two-year implementation timeline. (Courses may be designed and approved in year one and taught in year two).

- **Letter of Support:** Comments from the department chair or vice dean on the importance of the proposal plan to the department and school will provide the review committee with additional information to base their funding decision. For Interdisciplinary Teaching Awards, submit letters of support from all relevant Deans and Department Chairs. *A letter of support is not a requirement for large scale proposals.*

## Eligibility

- Full-time and part-time faculty. Individual faculty, groups of faculty from the same department, and interdisciplinary teams are welcome to apply; however, teams receive one award.

- Eligible courses will run during either fall 2021, spring 2022, or summer 2022.

- The CTL encourages all prospective grant applicants to schedule a consultation to develop the project plan and the appropriate in-kind support level. Please contact ColumbiaCTL@columbia.edu to schedule a meeting.

- See [appendix on page 13](#) to review the eligibility requirements for MOOCs.
Grant Types

Innovative Course Design

This grant supports the redesign of existing courses or the design of new courses to improve teaching and learning using innovative learning strategies. Designs advanced by technology or media-enhanced pedagogy are encouraged but not required. Awardees will receive in-kind support from the CTL and funds up to $20,000.

We encourage approaches that re-imagine class as a space for active and collaborative learning, where pedagogical innovations provide many opportunities for creative change within the Columbia curriculum. These novel modes of education allow for the thoughtful exploration of new teaching methods, course designs, and strategies for promoting active learning.

This request for proposals identifies innovative courses to be developed over the next academic year. Proposals from all disciplines and subject areas are welcome, but we particularly encourage those that:

- Develop ideas with significant potential to enhance teaching effectiveness and student learning and engagement.
- Make creative use of custom tools, online platforms, visualizations, media, etc., to make the course more accessible and engaging to students and/or to support course assignments.
- Include consideration of professional development needs to train instructors in new or alternative pedagogies to accommodate newly designed courses or delivery approaches.
- Include consideration of any necessary or novel skills or digital literacies that students will need to engage in the new course format.
- Lead to measurable impact on student learning.

Innovative Course Module Design (Start Small!)

This grant supports experimentation with a new pedagogical strategy or tool without attempting a full course redesign. These grants are designed to promote innovative thinking about and approaches to teaching, learning, and student engagement that involve scalable high-impact practices and thoughtful assessment of student learning.
Faculty who have ideas for course innovation are encouraged to use this Course Module Design (Start Small!) grant to pilot tools and/or pedagogical strategies that could be expanded into a future Innovative Course Design proposal. Successful recipients of the Course Module Design grant will be given special consideration for future Innovative Course Design funding opportunities.

Awardees will receive in-kind support from the CTL and funds up to $2,000.

Examples of potential grant-funded expenses for the Course Module Design grant include:

- Devices and software to support active learning practices (e.g., screencasting, adaptive learning software);
- Software and devices for laboratory and maker projects;
- Training and supplies for innovative pedagogical methods such as Reacting to the Past, game-based learning, team-based learning, case-based teaching, and peer-led learning;
- Resources for teaching development or to support faculty development related to a discipline-specific or other instructional innovation, such as books, webinar or conference attendance; and
- Hardware or software to support innovations aimed at making learning materials more accessible and inclusive (e.g., speech recognition / captioning software, media production software).

**Provost’s Interdisciplinary Teaching Awards (ITA)**

Provost’s Interdisciplinary Teaching Awards (ITA) are designed to support faculty from different disciplines to work collaboratively on the design and launch of innovative interdisciplinary courses. Awardees will receive in-kind support from the CTL and funds up to $20,000 to teams of two or more faculty from different departments or schools to develop and offer undergraduate or graduate courses that integrate content and perspectives from different disciplines to enhance student learning. Awardees will also commit to teaching the course at least once over the next two years. If the proposal is funded, proper course work and academic approvals must be obtained from all appropriate committees and academic offices.

Proposals should present plans to design or redesign an undergraduate or graduate course that integrates content and perspectives from different disciplines to enhance student learning. Proposals must involve faculty from two or more departments or schools and may be in collaboration with centers or institutes. Proposals are welcome from all departments and schools at Columbia, as are all disciplines and subject areas. PIs must submit letters of support from all relevant Deans and Department Chairs.
Successful proposals will:

- Demonstrate thoughtful interdisciplinary faculty collaboration, involving two or more instructors from different disciplines;
- Describe the targeted undergraduate and/or graduate student cohort, likelihood of attracting students, and expected class size;
- Include appropriate learning goals and methods of assessing student learning;
- Propose innovative approaches to teaching interdisciplinary concepts and methods that have the potential to be more impactful on student learning than more traditional, disciplinary approaches;
- Specify the programs in which this would be offered as an elective or required course;
- Have the potential to become sustainable;
- Provide realistic budgets that effectively leverage available funding.

Large-Scale Teaching & Learning Grant

The Large-Scale Teaching & Learning grant offers in-kind or financial support of up to $20,000 per academic year to support large-scale, coordinated efforts around teaching initiatives and exploration. The project must have the potential for making a significant, lasting impact within a department/school/program beyond the funding period and must be sustainable. The types of projects that could be supported through this grant are large-scale initiatives such as:

- Curriculum review (course requirements for majors and/or program curricula), including assessment practices, capstone courses, mapping courses and student pathways, and creating departmental learning outcomes;
- Integrating experiential learning (study abroad, internships, community engagement, research with a faculty member, etc.) and assessments of experiential learning at the course and program levels;
- Consideration of departmental teaching evaluation and review practices, such as implementation or revision of peer review processes, best practices in using student evaluation data (for administrators and faculty), teaching observation training for departmental reviewers, development of teaching portfolios, and ensuring equitable and inclusive processes for the review of teaching;
- Development of pedagogical facilitation skills, such as facilitating active learning and student engagement with material, peers, and instructors; inclusive teaching practices at the departmental and individual course levels; contemplative practices in teaching and learning; student reflective practices to build student metacognition for learning; and promoting and assessing learning in discussion-based courses;
- Planning and curricular alignment of digital projects (such as capstones, digital humanities research, and maker space assignments) in majors or Core courses with learning design and assessment.
Massive Open Online Courses (MOOCs)

Courses offered through MOOC platforms have the potential to reach large and global audiences, to stimulate curiosity and intellectual exploration, to make more visible the teaching and research activities of the University, and to promote public engagement. While the experience of developing and producing a MOOC is rewarding, it can also be very demanding, requiring substantial time and resources from the faculty. With some productions lasting more than a year, it is critical to engage in careful planning and coordination of numerous activities, including course content, course design, media production, rights clearances, and publicity. The proposal process ensures that Columbia’s MOOCs reflect the University’s commitment to teaching excellence and that courses receive full support in each of these areas.

Proposals from all disciplines and subject areas are welcome. We particularly encourage proposals for courses that:

- Cover topics that have not previously been taught as a MOOC on edX or Coursera
- Feature innovative course design and materials
- Enhance the educational experience of Columbia undergraduate and graduate students and of learners everywhere

Accepted courses will receive consultation services and support for instructional design, content and media production, and software development from the Columbia Center for Teaching and Learning (CTL). Funds will be available from the Office of the Provost for each MOOC of up to $25,000. These funds and other funds available to the instructor(s) must cover all teaching and production costs (including teaching assistants/course assistants costs, rights clearances, and media costs that exceed the CTL’s normal in-kind support). For more information on the MOOC RFP requirements, see appendix on page 13.

Emerging Technology Grant

This grant supports faculty members who want to experiment with new pedagogical strategies using emerging technologies in their classrooms to improve teaching and learning along with improving student engagement and outcomes. These grants are designed to promote innovative approaches with emerging technologies specifically involving augmented/virtual/mixed reality and 3D scanning/printing.

Awardees will receive in-kind support from CUIT and funds up to $20,000.

Examples of potential grant-funded expenses include:

- Augmented/virtual/mixed reality head-mounted displays
● Structured-light 3D scanner
● Desktop 3D printer including materials
● Computing hardware resources (ex: dedicated VR computing backpack)
● Augmented/virtual/mixed reality software packages

Contact etc-contact@columbia.edu to schedule a consultation.

Reporting

Awardees are required to submit a summary report of project success and a description of expenditures to the Office of the Provost. The report should reference assessment and evaluation data and describe insights and conclusions, answering such questions as:

● For course projects:
  ○ How did the innovation support the student learning goals of the course and how did it impact the student experience of the course?
  ○ How well did the new curricular elements meet the original course design goals?
    ■ Were the lesson plans, instructional materials, media, and assessments, aligned with learning needs?
  ○ Reflecting back:
    ■ If you had the opportunity to do this all over again, with the same resources, what would you do differently?
    ■ What could be enhanced to improve student success overall?
  ○ Looking forward: With the above data and reflections in mind, how has this project--the experience, the data, your reflections--influenced your future course design decisions and/or teaching practice?
    ■ How can you reasonably sustain the benefits of these course redesign decisions in the future?
    ■ Based on what you learned on this project, what are some small changes you might make to other courses that you teach?

● For large scale projects:
  ○ How well have participants achieved project outcomes?
  ○ How well were project activities implemented?
  ○ How did participants experience the project activities, both in terms of achievement of key outcomes and satisfaction?
  ○ Reflecting back: If you had the opportunity to do this all over again, with the same resources, what would you do differently?
  ○ Looking forward: With the above data and reflections in mind, how has this project--the experience, the data, your reflections--influenced your school’s and/or your department’s teaching and learning practices?
How can you reasonably sustain the benefits of these teaching and learning practices in the future?

Based on what you learned on this project, what other changes might you implement within your school or department?

The report will be important in informing continued strategies to develop hybrid learning approaches and in providing input to the Office of the Provost as it continues to develop initiatives to support teaching and learning.

Awardees will be invited to present on their projects at CTL events including the annual Celebration for Teaching and Learning Symposium in order to share the lessons learned with the broader Columbia community. Additionally, awardees might consider submitting an article for publication or presenting at a disciplinary or pedagogical conference. Please note: faculty who wish to make student data public as part of this dissemination may need to obtain IRB approval.

Submission Procedure

Faculty submitting a proposal must complete the proposal submission form. In this form, you will be asked to attach your proposal with a letter of support, if applicable, as one PDF. This is a multipage form, so we recommend that you preview the specific submission questions for the grants (in PDF format) linked below.

- Innovative Course Design Grant
- Innovative Course Module Design Grant
- Interdisciplinary Teaching Award (ITA)
- Large-Scale Teaching & Learning Grant – for school, department, or program projects
- Massive Open Online Courses (MOOCs) Grant
- Emerging Technology Grant

Deadline

The deadline is Monday, April 19, 2021 at 5:00 P.M. Future RFPs will cover courses to be offered in 2022 and beyond. We look forward to continuing to support Columbia faculty as they develop new and exciting enhancements of teaching and learning at the University.
Review Process

Proposals will be reviewed by a committee of faculty representing a range of disciplines and schools who will provide a recommended set of awards to the Provost.

Notification

Awards will be announced by Friday, June 4, 2021. Faculty will be notified of the award amount and will be assigned a CTL contact for the project. The CTL contact, together with a team of staff with appropriate expertise for the specific project, will provide support in instructional design, pedagogy, media and/or technologies, and assessment.

Information Sessions

The CTL will hold a number of sessions to support grant applicants. Find out more about these offerings at https://ctl.columbia.edu/events/.

- Register for the Office of the Provost RFP Town Hall offered on Monday, February 22, 2021 3:00 PM - 4:00 PM. At this Q&A event, CTL and CUIT staff will answer questions about the types of awards and the application process.
- Register for the Assessment Tune-Up for RFP Applicants offered on Thursday, March 25, 2021 12:00 PM - 1:15 PM to build or refine the evaluation and assessment section of the proposal.
- Contact the CTL at ColumbiaCTL@columbia.edu to request a consultation. CTL consultants will help applicants select the appropriate grant, answer questions about the application process, and/or provide feedback on proposals.
- Learn more about previous successful projects and interact with awardees at the virtual Celebration of Teaching & Learning Symposium in March 2021. More details to come soon.
Appendix: MOOC RFP 2021 Details

Eligibility

- Full-time faculty.
- MOOCs to be released in 2022.
- A prior consultation with the CTL is strongly recommended before completing the proposal. Please contact ColumbiaCTL+mooc@columbia.edu to schedule a consultation.

Proposal Requirements

I. Cover Sheet: Include name of the PI(s), title of the course, and school or department.

II. Narrative: The narrative section (2-3 pages) provides an overview of the proposed course or course series, describing its rationale, approach (instructor-led or self-paced), intended audience, and length per course (6-8 sections per course recommended). While the narrative provides a course synopsis, it should also articulate your motives and aspirations. The specific form the narrative takes is flexible and will likely depend on the nature of the course being proposed. Respond, directly or indirectly, to the following questions:

- Why is this particular course a good candidate for development as a MOOC?
- How will this course take advantage of the scale, reach, or other affordances of the MOOC platforms?
- How will this course engage a diverse and global audience?
- What will be the longevity of the course beyond the initial run?
- How will developing this course contribute to your teaching?
- What parts of the course would you consider using in your Columbia courses?
- How much new course material will need to be generated?
- How does the course differ from existing classes offered by MOOC providers?
- Describe any MOOCs you have participated in, as an instructor or a learner, and how that participation will inform your work on the MOOC.

Generally, course narratives will be strongest when they include specific examples of topics you will cover, teaching methods you intend to use, or activities that you hope to incorporate into the class.

For instructor-led courses, estimate the expected frequency for repeated offerings over a period of two years after the initial release. The estimate should account for availability of the instructor and teaching assistants participating in the course.
III. Syllabus: The complete syllabus (2-3 pages) indicates how the course will be divided into sections, modules, or other logical units. For each section of the course, please provide a clear description of the topics to be covered, required readings, and assignments or other activities and number of hours of work expected of the students.

IV. Production Needs and Timeline: Describe in detail (2-3 pages) the specific materials that will need to be created for the course. This should include lecture scripts, assessments, multimedia, visualizations, textbooks, software, and anything else that will need to be created or purchased for the class.

This section should also include an estimated timeline or schedule for producing the course content, including the lecture scripts, student assessments and learning outcomes. Course and media production will begin after faculty submits the learning objectives, course content, and assessments for learning design evaluation.

V. Copyright: If the course will rely on copyrighted material (texts, images, videos, etc.), you will need to describe briefly (1 page or less) the nature and extent of these materials, as well as their relative importance within the course. Please indicate whether any public domain, open-access, or rights-free materials could be substituted for copyrighted works in the course.

VI. Promotion and Marketing: A description of how the instructor, department and school will promote the course offering.

VII. Budgets and Budget Justifications (1-2 pages): Funding up to $25,000 can be used for course preparation, external course content, technology and media development costs, administrative costs, teaching assistants/course assistants, and rights clearances. Provide a detailed budget for these expenses. Please mention all other sources of funding, if any. Provide a detailed scope of work for in-kind support from the CTL.

VIII. Letter of Support: A letter of support from the applicant’s Dean or Vice Dean must be provided. In order to provide the review committee with additional information to base their funding decision, deans or vice deans are invited to provide comments on the importance of the proposal plan for their school.