Texas A&M Institute of Data Science Course Development Grant Program

Goals: The Texas A&M Institute of Data Science (TAMIDS), in association with the Texas A&M Center for Teaching Excellence, solicits proposals for enhancing data science education at Texas A&M. The aim of the TAMIDS Course Development Grant Program is to support faculty to develop new courses in Data Science (including Artificial Intelligence and Machine Learning within the program scope) or to revamp existing courses to include Data Science components. The program supports development of for-credit courses for graduate and/or undergraduate TAMU students, and of similar components within summer programs or for broader outreach. Possible proposed deliverables include, but are not limited to, class notes, videos, labs, homework, and exam problem sets. The funds are intended to support time for the proposer to design and develop the course and deliverables, and can also support associated faculty, researchers, or students engaged in the proposed development activities. The funding does not support delivery of the proposed program when completed.

Support: TAMIDS will provide up to \$15,000 unrestricted funds deposited in the lead proposer's research account for accepted proposals. The funds will be deposited in two installments, the first \$10,000 at the start of the project, and the remaining \$5,000 when the proposed deliverables are completed (requiring submission of any new course to CARS) if this occurs on or before December 31, 2023.

TAMIDS has developed resources for credit-bearing courses and non-credit-bearing training in Data Science and is able to assist awardees who wish to adapt or utilize these resources within their project. Details concerning these resources are available at https://tamids.tamu.edu. Proposers who plan to use these resources should discuss the role of these in their proposal with the TAMIDS Director (Dr. Nick Duffield, duffieldng@tamu.edu) prior to submission.

Eligibility: Individual and team proposals are allowed. The lead proposer must be a full-time Tenured / Tenure Track or Instructional Track faculty of any level with primary affiliation in Texas A&M University (including Galveston and Qatar campuses), TEES, TEEX, AgriLife Research, AgriLife Extension, or TTI. Collaboration outside these organizations is permitted, but funds will only be available to personnel within these organizations.

Limitations: Each person may be a proposer (lead or otherwise) on at most one proposal.

Deadline: Proposals will be accepted up to the deadline date of January 17, 2022.

Proposal Review: Proposals will be reviewed competitively by a committee established by the TAMIDS Director, with awards being communicated by February 21, 2022.

Conditions: The following conditions apply to course development projects supported under the program: (a) The proposer's department confirms fit of the course within program curriculum, and that the course is expected to be offered regularly at Texas A&M using the developed content; (b) Revised courses must have a substantial amount of new content compared with past offerings; (c) In the case of two or more proposals having marked overlap, TAMIDS may require coordination of the proposed activities as a condition for support; (d) The proposer should submit a brief report on outcomes at the end of project. See specific requirements in "Submission of Proposals" below.

Review Criteria: The following criteria will be used to assess proposals, where relevant:

Content, Positioning & Deliverables:

- (i) Demonstration of substantial amount of new content;
- (ii) Specific project deliverables (such as class notes, videos, labs, homework, problem sets);
- (iii) Positioning of course within Data Science program of proposer's Department and/or College;

Reach, Impact & Partnership:

- (iv) Promotion of interdisciplinary Data Science education;
- (v) Engagement of students with research activities facilitated by or coordinated with the course;
- (vi) Broader impact, reach, and generalization beyond the proposer's organization;

Approach & Metrics:

- (vii) Utilization of innovative approaches to Data Science education, with justification of approach;
- (viii) Demonstrated grounding within current educational theory and practice;
- (ix) Outline of metrics and evaluation methods that would be used in the proposed course.

Submission of Proposals: Finalized proposals should be submitted by email to datasciencejobs@tamu.edu with the subject line "Data Science Course Development Grant Program" as a single pdf file containing the following information:

- 1) Summary page, including:
 - a) Heading: "Texas A&M Institute of Data Science Course Development Grant Program"
 - b) Name, department, email address for lead proposer and any co-proposers
 - c) The name and level of the course to be developed or revised (with number for existing courses)
 - d) Project summary, 200 words maximum
- 2) Project narrative including the following information:
 - a) Intended audience, likely prerequisites, and estimated number of students
 - b) Frequency of offering the course
 - Description of the course development activity including development process and deliverables. Proposers
 are encouraged to include information responsive to the review criteria listed above, where relevant for their
 proposal (1000-word limit)
 - d) References to external literature & related programs. These do not count against the word limit.
 - e) Current syllabus of any course for which revision is proposed, if applicable.
- 3) Support letter from lead proposer's Department Head confirming fit of the course within program curriculum, and that the course is expected to be offered regularly using the developed content (for new courses) or updated content (for existing courses). Proposers are encouraged to discuss their proposal with their departmental representatives before submission to establish fit within their program and to facilitate awareness of any related proposals with which they may wish to coordinate.
- 4) The resumes of all members of the proposing team (each 2 pages maximum)

Contact Information: Jennifer South, TAMIDS, isouth@tamu.edu