Instructor. Prof. Kamesh Madduri, 343E IST Building, madduri at cse.psu.edu, 814-865-0883. Office hours: TR 1.00–2.30 PM (343E IST), or by appointment (madduri.org/cal).

Class Overview and Topics. This class provides students a hands-on introduction to scalable graph mining. Topics include graph modeling, centrality analysis, community detection, partitioning, visualization, compression, subgraph mining, and several other optimization problems. We will review current work and identify research challenges related to computational analysis of large graph data. We will implement most of the algorithms studied in class to analyze collaboration graphs constructed from the Internet Movie Database (IMDb) and the DBLP Computer Science bibliography database.

Prerequisites. CMPSC 465, CMPSC 311.

Class Material. All class presentations, lecture notes, and homework assignments will be posted on Penn State’s Angel CMS and/or the class Piazza site. Please send all class-related email to the instructor through Angel. We will be using Piazza for announcements, class discussions, and for clarifications regarding homework and exams.

Evaluation and Grading. The class grade will be based on homework assignments (40%), class participation (15%), scribed lecture notes (10%), and a project (35%).

Attendance Policy. I strongly encourage students to attend all the lectures. Please let me know if you will be missing multiple classes for legitimate, unavoidable reasons.

Academic Integrity. Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity includes a commitment by all members of the University community not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others. Students must abide by the administrative policy for academic integrity (please see http://www.psu.edu/oue/aappm/). Avoid plagiarism (http://tlt.its.psu.edu/plagiarism/tutorial), and please contact me first if you are in doubt.

Educational Equity. Penn State welcomes students with disabilities into the University’s educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Office for Disability Services (ODS) at 814-863-1807 (V/TTY). For further information regarding ODS, please visit the Office for Disability Services Web site at http://equity.psu.edu/ods/ In order to receive consideration for course accommodations, you must contact ODS and provide documentation (see the documentation guidelines at http:)
If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please share this letter and discuss the adjustments with your instructor as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.