**CS454 Signature Project—Spring 2026**

**Feedback for the NP-Completeness Paper**

As with the Current Events paper(s), To be effective, the NP-Completeness report must have solid technical content, and that content must be presented well. Thus, feedback/grading for this assignment involves both content and writing.

**Author’s Name:**

**NP-Complete Problem Discussed:**

**Feedback From (Name):**

**Introduction**

* Identifies NP-complete problem (perhaps with context
* Outlines structure of paper that follows

**Description of Problem**

Presents a clear discussion of the problem

**Reasonably Complete Example**

* Presentation clear and complete
* Example highlights elements of target problem

**Explanation of why Problem is in Class NP**

* Overview/conclusion
* If focus on verifier
* outline/construction of verifier
* description of how certificate or similar) allows verification in polynomial time
* If focus on construction of a non-deterministic Turing machine
* outline/construction of machine
* description of how machine will provide an answer in polynomial time

**Proof Problem is NP-Hard**

* Overview/conclusion
* Identification of a known NP-Complete Problem
* Identification of a mapping from the known problem to the target problem
* Analysis of why the mapping runs in polynomial time

**Conclusion**

Clarifies how major elements of the discussion fit together within an overall framework.

**References, Citations, and Use of Quotes**

* References contain proper information (e.g., author, title, publisher, date information)
* At least 3 quotations given, with proper format and citation

**Writing/Presentation**

 Report is well organized, headers identify sections, paragraphs are coherent, writing seems clear and efficient.