

# Trustworthy Machine Learning Seminar

## Grading Rubrics

Grading of each criterion will be done using a scale of 0/50/70/100%.

### Seminar Presentation Rubric (100 points)

Criterion	Pts	Exemplary (A)
Technical Understanding & Correctness	25	Explains key ideas, math, and algorithmic steps correctly; anticipates confusions; no factual errors.
Literature Positioning	15	Frames problem and approach within the relevant literature; clarifies novelty vs. incremental advance.
Trustworthiness Analysis	15	Identifies relevant dimensions (fairness, privacy, robustness, alignment, attack surfaces); discusses metrics and limitations.
Methodology & Assumptions	10	States formal assumptions; examines implications of assumptions on applicability of method
Empirical Rigor	10	Discuss baselines, ablations, stats/uncertainty, appropriate metrics; identifies any issues with evaluation.
Slide Quality & Organization	10	Clear structure, readable figures/equations, helpful schematics.
Delivery, Timing, Engagement	10	On time, confident, invites questions, good pacing.
Discussion Facilitation	5	Prepares sharp prompts, moderates Q&A, connects to other readings.

#### Scoring Sheet (for instructor use):

- Technical correctness (25): \_\_\_
- Literature positioning (15): \_\_\_
- Trustworthiness analysis (15): \_\_\_
- Methodology/assumptions (10): \_\_\_
- Empirical rigor (10): \_\_\_
- Slides/organization (10): \_\_\_
- Delivery/timing (10): \_\_\_
- Discussion facilitation (5): \_\_\_

Total: \_\_\_/100

## Paper Critique Rubric (100 points)

Criterion	Pts	Exemplary (A)
Accurate Summary	15	Faithful, concise, captures claims and evidence; no straw-manning.
Significance & Positioning	15	Assesses importance, situates vs. close prior work, states novelty.
Methodological Soundness & Assumptions	20	Examines assumptions and validity of design/theory.
Evaluation Quality	20	Checks reasonableness of baselines, metrics, ablations, and validity of results; notes if anything is missing or underwhelming.
Trustworthiness Connection	15	Connects the paper to the appropriate broader theme(s) of trustworthiness; considers implications of the work
Constructive Suggestions	10	Specific follow-ups or questions that would strengthen the work.

### Scoring Sheet (for instructor use):

- Summary (15): ---
- Significance (15): ---
- Methodology (20): ---
- Evaluation (20): ---
- Trustworthiness (15): ---
- Suggestions (10): ---

Total: ---/100

## Project Selection Rubric (100 points)

Criterion	Pts	Exemplary (A)
Problem Statement & Novelty	40	Clearly articulates a nontrivial research question in TML, explains why it matters and your approach is novel.
Techniques & Feasibility	40	Outlines concrete methods/approaches that feasible within the semester timeline and are computationally feasible.
Connection to Trustworthiness	20	Explicitly ties to robustness, fairness, privacy, alignment, or other aspects of TML

### Scoring Sheet (for instructor use):

- Problem Statement & Novelty (40): \_\_\_
- Techniques & Feasibility (40): \_\_\_
- Connection to Trustworthiness (20): \_\_\_

Total: \_\_\_/100

## Progress Report Rubric (100 points)

Criterion	Pts	Exemplary (A)
Introduction & Problem Statement	15	Clear statement of research problem and its significance for TML.
Background & Related Work	15	Situates project within literature; contrasts with prior work.
Methodology & Experimental Design	25	Detailed description of methods, datasets, models, metrics, and baselines.
Initial Results & Analysis	25	Presents at least half of experiments; interprets results rigorously; identifies limitations.
Challenges & Adaptation	10	<i>If appropriate</i> , explains obstacles faced and justified adjustments to plan.
Clarity & Organization	10	ICLR workshop-paper style, coherent structure, professional writing.

### Scoring Sheet (for instructor use):

- Introduction & Problem Statement (15): ---
- Background & Related Work (15): ---
- Methodology & Experimental Design (25): ---
- Initial Results & Analysis (25): ---
- Challenges & Adaptation (10): ---
- Clarity & Organization (10): ---

Total: ---/100

## Project Presentation Rubric (100 points)

Criterion	Pts	Exemplary (A)
Problem Motivation	15	Clearly states the problem, why it matters for trustworthy ML, and its significance.
Contributions & Relation to Prior Work	20	Articulates main contributions, compares fairly to prior literature, highlights novelty.
Method Explanation	20	Provides intuitive and technically accurate explanation of method or theoretical results; both high-level and precise details accessible.
Evaluation & Results	20	Presents empirical results or formal guarantees; includes appropriate baselines/metrics; interprets results rigorously.
Limitations & Future Work	10	Thoughtfully discusses shortcomings, assumptions, and potential extensions.
Delivery & Engagement	10	Both team members speak; well-paced 20-minute recording; slides are clear and professional.
Q&A Participation	5	Engages actively in live discussion; answers questions thoughtfully and accurately.

### Scoring Sheet (for instructor use):

- Problem Motivation (15): ---
- Contributions & Relation to Prior Work (20): ---
- Method Explanation (20): ---
- Evaluation & Results (20): ---
- Limitations & Future Work (10): ---
- Delivery & Engagement (10): ---
- Q&A Participation (5): ---

Total: ---/100

## Deliverables Rubric (100 points)

Criterion	Pts	Exemplary (A)
Reproducibility & GitHub Repo	40	Complete, documented code/data/scripts; straightforward reproduction of results; instructions clear.
Final Report (ICLR workshop format)	40	Thorough, rigorous workshop-style paper covering problem, methods, results, and conclusions; clear writing and figures. All issues I identified in the progress report should be rectified.
Slide Deck	10	Should be present.
Presentation (20-min prerecorded)	10	Box link should be present and accessible.

### Scoring Sheet (for instructor use):

- Reproducibility & GitHub Repo (40): \_\_\_
- Final Report (ICLR workshop format) (40): \_\_\_
- Slide Deck (10): \_\_\_
- Presentation (10): \_\_\_

Total: \_\_\_/100