# SENTIENT YLLABU

# Syllabus Resources

The Sentient Syllabus Project<sup>1</sup>



Version 4 – 2023-02-23

2
2
3
4
6
7
9
9
9
10
11
13
13

Elsewhere please cite as:

Boris Steipe (2023) "Syllabus Resources". The Sentient Syllabus Project http://sentientsyllabus.org.

This document is licensed under the terms of a Creative Commons - Attribution - Non-commercial -Share-alike license, which means it is free, and will remain free. Please follow the link for details. However, if you wish to use and reuse some of the sample text in your own syllabus, for a course that you teach at an educational institution, you can do so with further attribution if your normal institutional copyright applies.

### This document ...

This document contains patterns of text for academic syllabi in an era of generative Al. Simply copy what you find helpful and reuse in your own syllabus. If you find this useful, tell others about it. If you find errors, omissions, or have other suggestions, please let us know so we can improve it.

Summaries appear in a shaded box like this one.

Notes to educators are in an outlined box.

Text in a serif font is meant to be copied and used.

In Flux New 2023-01-04

Keep in mind that the situation is in flux and robust institutional responses have yet to appear. The date of the last revision appears at each section heading.

A disclaimer in your syllabus will be helpful. Part of the reason why this is difficult territory is that copyright issues have not been resolved and this raises the question of institutional liability. At this time, we cannot even propose what a copyright statement might look like. Be careful with assessments: departmental guidelines would typically allow you to change the rubrics, as long as this happens before submission, but re-weighting assessments may be difficult.

Expect changes. The developments around generative AI are in flux and the rules that are expressed in this syllabus may need to change on short notice. This may affect the contents of assignments, as well as their evaluation.

All considerations derive from three principles:

- 1. An Al cannot pass a course.
- 2. Al contributions must be attributed and true.
- 3. Al use should be open and documented.

Three Principles. Generative AI (Artificial Intelligence that can produce contents) is now widely available to produce text, images, and other media. We encourage the use of such AI resources to inform yourself about the field, to understand the contributions that AI can make, and to help your learning. However, keep the following three principles in mind: (1) An AI cannot pass this course; (2) AI contributions must be attributed and true; (3) The use of AI resources must be open and documented.

The minimum passing requirements are likely higher than what you would have accepted previously. This can be made explicit with Al generated examples that show what is no longer considered sufficient. Keep in mind that the goal is not to critique the Al, but to demonstrate a level of competence that can and must be surpassed.

To pass this course: AI generated submissions cannot achieve a passing grade. This is necessary to ensure you are competent to surpass generative AI in the future – whether in academia, research, the workplace, or other domains of society. If this cannot be achieved, if you are not able to maintain control of the rules, you are entering an unwinnable competition. To provide a baseline that is specific for the course, we will produce, analyze, and provide AI-generated sample solutions. Your task will be to surpass them.

Referencing ensures attribution. Validation ensures facticity. Details on both are included in the section on Academic Integrity.

*Referencing and validating.* You are taking full responsibility for AI-generated materials as if you had produced them yourself: ideas must be attributed and facts must be true.

We expect benefits from encouraging the open use of Al tools. (1) Students will become competent in the use of Al tools, (2) the risk-benefit balance of illicit use will change, and (3) students will understand the Al's weaknesses and their own strengths.

*Openness*. We encourage you to use AI tools to explore the field, play with knowledge, and help you study. But you need to be open about this, and document your use.

You could consider reserving a portion of your grade for student's documentation of their Al use. This positive incentive will further encourage transparency. Details are included <a href="here">here</a>.

*Documentation*. A portion of your term grade will evaluate your documentation of AI use throughout the course. By keeping track of your AI use and sharing your experiences, we all gain understanding, identify potential issues in this rapidly changing field, and discover better ways to use the resources for our objectives.

# **Assessing Materials**

Last revision 2023-02-18

This section mostly concerns submission of assignments that have a substantial writing component, but keep in mind that Al tools can contribute to planning, research, finalizing, and formatting, and it can produce images, music, video, computer code and other media.

Common Al tools can easily write entire essays, even books. The *Generic writing* text can apply to essays, reviews, reports, abstracts, annotated bibliographies, grant proposals, and many more – and to other media in spirit. Assessment should focus on how students surpass this level. Be aware that this may put students who do *not* use Al resources at a disadvantage. Since students may need to disclose personal information to gain access to generative Al services (e.g. phone numbers) Al use should not be mandatory – unless this issue can be addressed. But the need to jump in now, while such issues are not yet fully under control, that is the new reality.

General writing. In principle you may submit material that contains AI-generated content, or is based on or derived from it, as long as this use is properly documented. This includes for example drafting an outline, preparing individual sections, combining elements and removing redundant parts, and compiling and annotating references. Your documentation must make the process transparent – the submission itself must meet our standards of attribution and validation.

If surpassing is an explicit objective, you could embed it like this:

In an appendix, describe in point form and with reference to specifics how your submission goes beyond the contributions of the AI.

Computer Code. In principle you may submit AI-generated code, or code that is based on or derived from AI-generated code, as long as this use is properly documented in the comments: you need to include the prompt and the significant parts of the response. AI tools may help you avoid syntax errors, but there is no guarantee that the generated code is correct. It is your responsibility to identify errors in program logic through comprehensive, documented testing. Moreover, generated code, even if syntactically correct, may have significant scope for improvement, in particular regarding separation of concerns and avoiding repetitions. The submission itself must meet our standards of attribution and validation.

If surpassing the AI is an explicit objective, you could embed it like this:

In your comments, wherever appropriate describe how your submission goes beyond the contributions of the AI.

*Closed book exam/quiz*. The use of AI tools is not permitted.

*Open book exam/quiz*. The use of AI tools is permitted, provided you follow our standards for attribution, validation, and transparency.

Generative AI may also be used when the assessment does not target writing, but performance. Examples include tests of practical skills, observation and demonstrations, oral tests, presentations, literature circles, role-playing, or live peer feedback. The text to be included in the syllabus would be modelled on what we covered above.

#### Some thoughts to consider:

- Generative AI may play a significant role in drafting, structuring and otherwise preparing
  performance assessments, such as presentations, debates, discussions, scenarios etc.
  The documentation of such contributions was described above, it would be appropriate
  to always require a statement on AI contributions, which might contain additional
  information: time taken, obstacles overcome, lessons learned, resources used ...
- If your motif for this type of assessment is to exclude the use of certain resources (closed book format), you may be engaging in a technological arms-race through speech-to-text queries or other assistive technologies, especially during online assessments. Moreover, closed-book assessments may have even less relevance outside of exam situations. You may consider moving to an open-book format instead.
- The speed with which the AI can provide and cross-reference facts is remarkable, and already surpasses what most humans can do. If the assessment format allows it for example in small group assessments you could actually include an AI as a participant, prompted by the instructor or a TA. This would help students understand how the AI can be used to provide a point of departure which can and should be surpassed, allow them to critically evaluate contributions without the social burden of causing offence, and catalyze community intelligence in a constructive us-versus-it competition in which there are no losers.

Regarding academic integrity, we have to do better to motivate and communicate the essential role of truth in academia as developed here. We express the principles clearly at the beginning and relate specific conduct to those.

Regarding attribution and authorship ("plagiarism"), generative Al in use today produces text through a formal process that does not involve understanding. The question of authorship has no trivial answer, as we discussed here. Generally, for the purpose of referencing, the AI itself is not a valid source, moreover, the submitter needs to take full responsibility for factual accuracy. Nevertheless, suitable acknowledgements are required.

Your department, faculty, or school might not have a suitable statement on academic integrity that you can refer to. In that case it will be useful to draft your own document, perhaps as an appendix to your syllabus; this document contains an example here.

Academic Integrity. Academic integrity is our foundation as a community of scholars and learners. It defines the values we personally uphold, and it expresses a shared understanding why we do so. This includes: a commitment to truth; a commitment to personal integrity; and a commitment to certain standards and shared values on which membership in this community is based.

These aspects need to be defined and justified, and be easily accessible. See the appendix for an example.]

By submitting an assignment for evaluation:

you assert that it accurately reflects the facts and to do so you need to have verified the facts, especially if they originate from generative AI resources;

you assert that all your sources that go beyond *common knowledge* are suitably attributed. Common knowledge is what a knowledgeable reader can assess without requiring confirmation from a separate source;

you assert that you have respected all specific requirements of your assigned work, in particular requirements for transparency and documentation of process, or have explained yourself where this was not possible.

If any of these assertions are not true, whether by intent or negligence, you have violated your commitment to truth, and possibly other aspects of academic integrity. This constitutes academic misconduct.

Note that AI generated text can generally not be identified as plagiarism. This is one of the reasons we advocate for open use. Instead of measuring the similarity of expressions and phrasing, we focus on the source of *ideas* and on transparency of process. However, to get students to freely disclose their use of generative text, you must be absolutely clear that they will not be disadvantaged by doing so.

Attribution. All ideas that are not originally one's own have a source and that source must be attributed. Please be aware that generative AI tends to invent sources. You have a two-fold obligation. (1) you need to document the process, and (2) you need to find and attribute the original source of the idea, identify the location within the source, and provide a working link to the location. If you quote the AI itself, label it as "synthesized communication" and reference it like the conventions for a "personal communication". Note that such a "synthesized communication" is not a valid source for facts, only for the conversation itself.

Generative AI does not actually "understand" its text like a human does, but creates a *plausible* response. Therefore references may not exist, quoted sources may actually state the opposite, logical contradictions and *non sequiturs* may appear, and cited text may be inaccurate. Fact-checking is required, and documented evidence for fact checking is required as well, to help students avoid committing an academic offence through negligence.

Facticity. Besides inventing sources, generative AI may invent facts as well. Verification is your responsibility: submitting factually wrong material is an academic offence, and whether the source of the error is you or the AI makes no difference. You need to check the facts, the quotes, the arguments, the logic, and document what you did to validate your material.

# Specific Assessment Types

### Sample rubrics

Last revision 2022-12-28

These sample rubrics are generic and apply to all types of materials that include Al-generated content.

These six levels reflect the conventions of many North-American universities..

- Outstanding: **A+** (90–100%)

- Excellent: **A** (80–89%)

- Good: **B** (70-79%)

- Adequate: **C** (60–69%)

- Marginal: **D** (50-59%)

– Inadequate: **F** ( < 50%)</p> Inadequate is a failing grade.

Sample rubrics: generic

Level	Description	AI motivated ru
Outstanding	Advances the field. Mastery of critical reflection on AI generated content; demonstrates the ability to abstract from the material, establish non-obvious relationships, and productively extend the source material; strong evidence of original thinking and deep understanding. May serve as a model on how to surpass AI generated content.	applied to all su regardless of wh was actually inv
Excellent	Accomplished. Insightful critical reflection on AI generated content; convincing improvements that include non-trivial connections; some original thinking; clear evidence that the level of understanding surpasses that of the synthesized contributions. In total, a significant improvement over AI synthesized content.	
Good	Competent. Critical reflection on AI generated content; generally successful attempts to improve on it; evidence that the material has basically been understood. Important further improvements beyond the quality of AI generated content could be made.	

ubrics that are ubmissions, hether the AI volved or not.

Adequate	Significant gaps. Use of AI generated content needs more critical reflection; attempts to improve need to be more convincing; not all material appears to have been understood. There is obvious and significant scope to further improve beyond the quality of AI generated content.
Marginal	Large gaps. Unreflected use of AI generated content; attempts to improve on it are inconsistent and not always coherent; lack of evidence that the material is understood. Barely surpasses the quality of AI generated content.
Inadequate	Shows no significant improvements over AI generated content.

### Participation marks

Last revision 2023-02-23

A good way to understand participation is "the contributions that flow from the student back into the course". In the past, we might have marked such contributions in discussion groups, chats, or group activities according to the effort they demonstrated. This is no longer appropriate since effort can no longer be reliably assessed. Thus we need to move to a concept of "non-trivial contributions", which might include critique of Al solutions, personal experience, and useful analogies, resources and perspectives.

Assessment of participation needs to be somewhat open-ended, otherwise the metric becomes the goal. Therefore we generally do not publish rubrics for participation, but we base assessment on our general understanding of performance levels.

Participation marks. Participation marks based on the non-trivial contributions you make to the course, for example on the discussion board, or in class activities. Valuable contributions are continuous and meaningful, they enrich the course experience for all and they support our diverse learning objectives. Most questions about facts will probably be handled quite well by generative AI, but there are many, many ways you can contribute your own experience and ideas. For example, advice on how to write better prompts, proposing and discussing useful analogies that can illuminate concepts, identifying novel resources and strategies, and general reflections on your own, personal experiences, will be highly welcome.

When students document their use of generative AI, it helps us understand the benefits and challenges, and contributes to developing best practice. By giving course credit for this activity, we recognize that the competent use of the tools is itself a learning objective, and we discourage illicit use. We include sample text and marking rubrics.

This is a new type of assessment, and students will need a sample document for guidance. Compiling such a document would be an excellent task for a TA at the beginning of the term. We think assigning 10% of term marks to this component would strike a good balance between providing a meaningful incentive for the students and not taking away from the main objectives of the course.

Documenting AI use. Throughout this term, you will maintain a journal that documents significant interactions with AI tools, for course credit. Document your prompts, the AI's responses, and how the response was used. You should include the documentation that you may have appended to other submitted work, but also exploratory use of the tools, and reflections on your experience. If you have a lengthy conversation with the AI, you may use an ellipsis "[...]" to truncate its response, but you must include your own prompts in full, without any omission. Through such documentation and reflection, you will contribute to a knowledge base of best practice and help others learn from your experiences.

# Sample rubrics: documenting AI use

Level	Description
Outstanding	<b>Engaging</b> ; illuminating reference for others; demonstrates the ability to abstract principles from observations; includes creative solutions to problems. A significant contribution to best practice.
Excellent	<b>Complete</b> , commented documentation; has comments on unexpectedly valuable or misleading outcomes and some suggestions for how to improve the interaction in principle. In its entirety a useful contribution to best practice.
Good	<b>Complete, but</b> including some irrelevant parts; should have more reflection. Still, many parts are a useful contribution to best practice.
Adequate	<b>Mostly mechanical</b> copy/paste; unclear objectives of the conversation; however mostly coherent and structured with headings. Only a few parts are useful as documentation of best practice.
Marginal	<b>Very little reflection;</b> mostly mechanical copy/paste; not always coherent and structured. Barely useful to establish best practice.
Inadequate	<b>Not usable</b> as documentation of best practice. Incomplete, disorganized, patchy, lacking reflection. Prompts were not fully recorded. Or, no significant additions to AI generated material.

Documentation of AI use, to support learning from the experience for all.

# **Appendices**

### **Example Statement on Academic Integrity**

New 2023-02-20

This Academic Integrity statement defines integrity in a positive sense. Shared values can motivate conduct as an expression of the self. This is the basis for collaborative education.

### The Nature of Academic Integrity

The very idea of the modern university rests upon one commitment: to pursue truth. Naturally this applies to this course as well, both to instructors and learners.

### 1: A commitment to pursue truth.

Our commitment to *truth* entails honesty (not lying about data, sources, tools), responsibility (accuracy, completeness, reproducibility), and transparency (providing context where required – such as conflict of interest) and more. We do not assume that the truths we hold are complete, thus we commit to be curious, and to progress. This is why we conduct research. This is why we value creativity, and why we think of answers not as an end in themselves, but as leading to new questions that are meaningful to us individually. Through this, our shared project becomes valuable, intrinsically human, and beautiful.

### 2: A commitment to personal integrity.

The meaning of *integrity* is related to wholeness. Personal integrity means to uphold values unconditionally, and at all times. Such integrity complements a commitment to truth, it adds a commitment to act, to make our values a part of everyday life, to promote them, and — when necessary — to defend them.

#### 3: A commitment to standards.

As a community, we embody shared values. This means, those who share those values and uphold them can consider themselves members of the community. Our shared values are codified in standards of behaviour. As members of our course community, whether educators or learners, we acknowledge the following standards to which we commit:

[Professional standards such as privacy, limits of practice, and respect]

*Equity*: fair and impartial treatment that respects our differences and acts to provide equal opportunities for achievement;

*Inclusiveness*: contributing to an environment in which everyone can feel welcome and respected as a person;

*Transparency*: being open about our work, and appropriately declaring conflicting interests we may have in the outcomes of our work or the members of our community.

A violation of these commitments is by its nature academic misconduct.

[END]