# Astronomy 311

Group Astronomy Presentation Guidelines

The astronomy presentation is a **group project** with the goal to teach the class about a **specific and detailed topic** you have researched within the material covered by ASTR 311. It is worth 25% of your final grade so **spend an appropriate amount of time on research**, **organization and the presention itself.** Do not expect to put it together at the last minute and receive a good grade. Read this guide fully!

NOTE: Presentation content is considered examinable material and will be tested.

#### Groups

Each group will have  $\sim 3$  members and give one presentation. All group members receive the *same* grade. Monitor your group's progress and see me ASAP if issues arise.

#### Presentation Proposal

The group MUST submit a joint proposal on VIULearn (*less than half a page*) which *clearly & specifically* states BOTH the *presentation topic* AND *the mode(s) of delivery* to be used. This proposal will be graded & returned with feedback/approval. If you wish to *change* ANY *non-trivial* aspect of your approved proposal you *MUST* speak with me FIRST.

Your choice of topic must fall within the scope of ASTR 311: that is, dealing with cosmology, relativity, quantum physics or the search for extraterrestrial life. For ideas, look through books, web sites (start with the LINKS page on the course website) and the course notes or chat with me. Choose a topic or aspect that is **NOT** covered **in detail** in class. Make sure your choice is **specific** - e.g. don't simply choose The Big Bang; instead focus on the Stellar Dark Ages or the WMAP satellite results. Then consider **how** your group will present your topic **to best TEACH the class about it**. What tools or aids will you need to communicate your ideas? How will you interact with the class? Your imagination is the limit!

### Astronomy Presentation Due Dates

The presentation proposal due date is specified in the Course Outline on the website.

The *presentations* will take place in class near the end of term; specific time slots are TBD.

#### Plagiarism and References

Plagiarism is a serious issue. It is defined as the "representation of someone else's words or ideas as one's own". Ensure that presentations are in your own style and words. Reference ALL images & content from external sources using footnotes or another standard form; define all terminology. More information and examples are provided later in this guide.

### Marking Criteria

The presentation is graded based on (\*\* see detailed rubric on website \*\*):

- 1. Content: detailed astronomical topic, accurate & up-to-date, understanding of topic
- 2. Presentation: organization, clarity, teaching/interaction with class, originality/creativity
- 3. References: expanded digital version of presentation with complete references

The presentation is *significant* (worth 25% overall) and is marked accordingly.

Content: it is vital that you explore a specific topic in detail. Some overlap with class material is fine but overall 'depth' must significantly exceed the class notes or textbook use numerous sources beyond these. Aim for overall content equivalent to a ten-page paper.

You should understand the topic you are presenting; you are expected to be able to answer reasonable questions related to your subject. Express ideas in your own words - do not simply copy information from books or the web. Define key concepts and terms for the class and avoid reciting 'factoids', presenting one undefined technical term/acronym after another, or dropping a bunch of dates or names without proper context. Remember - you are teaching the class about your topic, so ensure the level & content of your presentation is appropriate!

Presentation: it is an important skill to be able to present information to others in a way that is clear, concise, and accessible. Each group will have 20 minutes (+ some time for questions) to present a summary of their topic to the class. Keep to this time limit!

How should you approach the in-class presentation? As you have (only) 20 minutes to present, treat it like an 'executive summary'- you want to highlight and communicate only the *most important* details from your research (you will submit a complete, digital version of your presentation & research - see below). Speak to what drew you to your topic and share fundamental, surprising or critical results from your research. Be creative! You may use whatever aids you need during your in-class presentation - posters, overheads, skits, costumes,

music, Powerpoint, Prezi, Kahoot, etc. Keep TOTAL multimedia length to under 5 minutes (unless creating an original video). All group members MUST participate actively & equitably. Practice your presentation so you are engaging with the class and NOT simply reading from notes. Speak slowly, clearly & loudly enough so that everyone can hear & understand you; make frequent eye contact with your audience. Pay attention to how you communicate your research within this presentation. DO NOT simply slap pictures and facts into your presentation but think of how you arrange information in order to effectively teach the class about your topic. If you use Powerpoint or equivalent, consider slide background colour, font size & colour, positioning of text/images, and text (information) density. Have you included relevant, interesting and/or explanatory images, defined terms and explained your topic clearly? You need to make a strong, positive visual impression in addition to having solid content. See me well ahead of time to test computer connections.

(Digital) Submission: your in-class presentation should be a summary of a more detailed & fully referenced digital version which will be posted on the class website. The form of your submitted digital version will depend on your presentation method and may include a more detailed Powerpoint (or equivalent), a poster, speaking notes, your video, etc. It is your responsibility to ensure submitted material(s) are in a readily accessible format (eg. Powerpoint, PDF, Word, etc.). \*\* YOU DO NOT HAVE TO WRITE AN ADDITIONAL PAPER! \*\* Your in-class presentation is simply 'highlights' from the more extensive material contained in your digital submission.

References: your submission MUST include a complete bibliography citing ALL sources (factual information, images, videos, sounds, etc.) Use a sufficient number & variety of sources in addition to class notes and textbook(s); a dozen factual sources is a reasonable minimum. Many web sources are NOT peer-reviewed; use scientific sites ending with .edu, .gov or belonging to legitimate astronomical publications (eg. Astronomy Today, APOD, etc.). Wikipedia is NOT an acceptable peer reviewed source but may direct you to more appropriate sites. Verify information by utilizing a variety of sources, eg. books or journals. Factual information & images may be cited using ANY standard format (e.g. APA, MLA, footnotes); cite ALL non-original content & images as for a formal research paper. ONLY cite sources which were actually used (do not 'pad' references). Citations MUST appear at the location WHERE THE INFORMATION APPEARS in your slides, overheads or notes, e.g. ... the Moon is indeed made of cheese (Mousey 1982). Your bibliography MUST contain TWO SEPARATE SECTIONS, one for factual references and the other for image references. Consolidate ALL sources into these two sections. A sample is provided on the class website; for further information, see http://libguides.viu.ca/citing.

# ${\it Minimum} \ {\it presentation} \ {\it requirements} \ {\it checklist}$

# General

| $\square$ We have thoroughly read BOTH the <b>presentation instructions</b> & the <b>marking rubric</b>                   |
|---|
| $\square$ We have spoken to our instructor regarding questions & concerns about the presentation                          |
| $\hfill \Box$ We have notified the instructor about $\boldsymbol{ANY}$ (non-trivial) deviations from our proposal         |
| Content   |
| $\square$ Content & effort are (more than) $sufficient$ for a presentation worth $25\%$ of our $mark$                     |
| $\square$ Topic is $\textit{sufficiently}$ detailed/specific; expands $\textit{substantially}$ on any class material      |
| ☐ We understand & have clearly defined/explained all technical terms/scientific content                                   |
| Presentation  |
| Presentation is <i>clear</i> , <i>creative</i> , <i>accessible</i> and <i>teaches the class</i> about the topic           |
| $\square$ Everyone participates $equitably$ in the presentation & we have $practiced$ (no reading!)                       |
| $\square$ Our presentation uses the available time FULLY but adheres to the 20 minute limit                               |
| $\square$ Computer based presentations have tested classroom connections well ahead of time                               |
| References/Submitted Presentation   |
| Our (digital) submission is a "more complete" version of our presentation (or equivalent)                                 |
| $\hfill \Box$ Our (digital) submission is in a $standard,\ easily\ accessible\ format\ (eg.\ PDF)$                        |
| ☐ We utilize a <i>sufficient</i> number of <i>legitimate</i> , <i>reliable</i> , <i>varied</i> and <i>non-web</i> sources |
| Separate factual & image bibliographies; items are cited where they appear/are used                                       |