

SCI 302: Astronomy

School of Health and Social Sciences

5 Credits Effective Date: 7/1/2023 Grading Type: Decimal

List any Pre-requisite or Co-Requisite: N/A

Access to the Internet is required.

All written assignments must be in Microsoft-Word-compatible formats.

See the library's APA Style Guide tutorial for a list of resources that can help you use APA style.

Faculty Information

Professional experience information for instructors is found under *Syllabus*, *Schedule*, *and Course Team* in the online course menu.

Contact Information

Contact information for instructors is found under *Syllabus*, *Schedule*, *and Course Team* in the online course menu.

Course Description

This course introduces students to the conceptual foundations of astronomy. Students gain an overview of our planetary system, including the solar system, the earth and its moon, and other planets. Stars, galaxies, and the evolution of the universe are also studied. Students evaluate theories and observations about the possibility of intelligent life elsewhere in the universe.

Course Resources

Required and recommended resources to complete coursework and assignments are found on the course <u>Reading List</u>. Access is provided through the <u>Reading List</u> link in your online course as well as from the library homepage ("Find Your Reading List" button).

Note: Required resources that must be purchased by the student are tagged "Purchase from a vendor of your choosing." Required resources with a direct link, "Available through CityU Library", are available electronically at no cost to students.

Students in Canada may purchase course resources from the <u>Canada Bookstore</u>, and students outside the U.S. and Canada should contact their advisor or textbook coordinator for additional information.

Course Outcomes

This course will prepare students to:

- Identify the forces, physical nature, and motion of celestial bodies. (Planets in Our Solar System Presentation).
- Interpret the development of planetary, stellar, and intergalactic bodies. (Our Place in the Universe Project)

Question theories about the life cycle of the universe and other big issues in cosmology.
 (Big Questions Reflection Paper).

Grading Scale

The grades earned for the course will be calculated using City University of Seattle's decimal grading system, found in the current <u>University Catalog.</u>

Grading rubrics with details on how each assignment will be graded are located under *Assignments* and/or in *My Grades* in the online course menu. Students should review the rubric for each assignment prior to completing their work in order to understand how it will be assessed.

Course Assignments and Grading

Overview of Required Assignments	% of Final Grade
Course Activities	20%
Quizzes	20%
Planets In our Solar System Presentation	20%
Our Place in the Universe Project	20%
Big Questions Reflection Paper	20%
TOTAL	100%

Course Activities (20% of Final Grade)

Class participation through discussion is an integral part of this online course although it is typically less formal than other work submitted throughout the course. Participation is defined as active engagement in a discussion or other online activity.

To provide a structure for balanced participation and allow students to maximize the benefit of the discussion boards, it is recommended that students follow these guidelines:

- 1. Post responses to discussion questions in the first three days of the school week (Monday through Wednesday).
- 2. Post three or more thoughtful and topic-relevant comments to responses made by classmates during the last four days of the school week (Thursday through Sunday).
- 3. Respond to any questions that the instructor or peers have regarding the original post by the end of the school week.

Grading Components

% of Grade

TOTAL	100%
Timeliness	25%
Style and Mechanics	25%
Quantity of Responses	25%
Quality of Responses	25%

Quizzes (20% of Final Grade)

Students take weekly equally weighted online quizzes to reinforce the course materials. The quizzes test their ability to utilize scientific terminology as well as the identification and application of proper scientific concepts for a given problem. All quizzes are closed book and notes.

Planets In our Solar System Presentation (20% of Final Grade)

The purpose of this assignment is to research one planetary body in the solar system and describe how its composition and environment play a critical role in our understanding of the solar system and astronomy. Students present their findings about the planet or planetoid in a slide/video presentation.

Concepts to be covered:

- What are the physical characteristics of the body? (Size, shape, composition)
- How does it move in relation to the Sun? (Lengths of the days and years, position from the sun, et, axial tilt, etc.)
- How has our understanding of the body changed over time?
- An analysis of what humanity stands to learn or gain from studying the planet? (Mining, colonization, the chances of finding life, etc.)

The presentation must include the following elements:

- Title slide
- 5-6 content slides
- APA 7th Format references slide with a minimum of 3 scientifically trusted sources in addition to the textbook

Students must cite the sources of all ideas, facts, and information used that are not their own even if they have put the information into their own words. Failure to do so is a violation of the Academic Integrity Policy even if the oversight is unintentional.

If submitting a video, students should also submit a recap or script of their presentation and a references page.

Grading Components

% of Grade

Organization and coherence	20%
Content accuracy and support	25%
Analysis	25%
Visual design	10%
Style, delivery, and APA	20%

TOTAL 100%

Our Place in the Universe Project (20% of Final Grade)

The purpose of this assignment is to give students hands-on experience in the field of astronomy. Students **choose one** of the following projects to understand how our understanding of the universe and our place in it has fundamentally changed over time. Students use the experiences gained in the project to write a summary of their findings and an analysis of how their new understanding has major implications for the overall human experience.

Project Choice One: Replicate an experiment from the scientific revolution

Students replicate an astronomy/physics experiment or observation that helped to fuel the scientific revolution. Any experiment related to optics, Newton's laws of motion, and observations by Galileo or Kepler could be replicated for this project. Students should explain the experiment and provide a brief background of its relevance to astronomy. After replicating the experiment, students must also discuss how this experiment is important to human understanding of the universe.

Project Choice Two: Attend an event related to astronomy

Students research an event, institution, or educational attraction related to astronomy and participate. Students can join in a stargazing party by a local astronomers' club, visit a planetarium, or attend an educational seminar or presentation. Students write about the experience of being a part of the event and the major takeaways from being involved. Students also relate what they experienced in the field to the concepts covered in the class lessons, including their analysis of the topic's importance to the human experience.

Project Choice Three: Interview a professional astronomer

Students will reach out to a professional in the field of astronomy and conduct an interview about their life and work. Students are required to schedule a meeting time (via zoom or in person), write their own interview questions, and record the interviewee's answers. After the interview, the student will write a brief biography about the astronomer, the goals of their work, and the implications their discoveries will have in the field of astronomy. Be sure to record your interview in either sound or video format.

The project must include the following elements upon submission:

Title page

- 4-5 pages of original content connecting the project to concepts learned in class.
- All evidence of project completion (i.e., photos, sound or video recordings, notes taken, and/or other results).
- Reference page with at least three scientifically trusted references in addition to their textbook
- APA 7th Format

In their papers, students are expected to combine their findings or observations with their own thoughtful analysis of the implications for humanity. Information found in a minimum of three reliable sources other than a textbook should be used to support their analysis. This can include news articles from trusted publications and scientific journals. Students need to keep in mind that the analysis section of the paper is not simply a summary of their reading. Therefore, as in any academic writing, students should not merely copy information from another author or from an Artificial Intelligence writing technology, but instead, use evidence to support the contentions they have drawn from their own findings. This paper must meet APA requirements of format and style. Students must cite the sources of all ideas, facts, and information used that are not their own, even if they have put the information into their own words. Failure to do so is a violation of the Academic Integrity Policy, even if the oversight is unintentional.

Grading Components	% of Grade
Organization and coherence	15%
Project engagement and completion	35%
Analysis and use of course concepts	35%
Style, mechanics and APA (citations,	15%
references, formatting)	
TOTAL	100%

Big Questions Reflection Paper (20% of Final Grade)

It might seem like the universe is some faraway place that has no real effect on our daily lives, but we have learned that understanding the universe can have serious implications for our culture, politics, economy, and belief systems. Cosmological hypotheses call into question our understanding of who we are as a human species. The purpose of this reflection paper is for students to conceptualize ideas at the frontier of astronomy and how they impact humanity's view of itself.

Possible topics:

Listed below are just a few examples of topics for research. Students can also choose a topic that is not on this list in an area of interest.

- The Big Crunch vs the Big Freeze- How will the universe end?
- Life on other planets- What will the discovery of life in the galaxy mean for us on Earth?
- Beyond the Universe- Are there more universes, other dimensions, or nothing at all?
- The Kardashev Scale- Will humanity reach a higher level? How can we do it?

 Make it So- What are some science-based ways that humans could travel quickly around the galaxy in the future?

Concepts to be covered:

- Identify the main challenges of the topic and why is it important for humanity to learn more about it as a species
- Predict how the development of these concepts will change our understanding of our place in the universe
- Analyze the political, religious, economic, and societal impacts of discovering more about the topic
- Reflect on how a better understanding of the topic will impact our daily life

The paper must include the following elements:

- Title page
- 3-4 pages of content
- Reference page with at least three scientifically trusted sources other than the textbook
- APA 7th Format
- Since this is a reflection paper, students may refer to themselves in the 1st person.

In their papers, students are expected to combine their own thoughtful analysis of the topic with information found in a minimum of three scientifically trusted sources other than a textbook. This can include sources, such as news articles from trusted publications, national space program websites, and scientific journals. Students need to keep in mind that this is to be an analytical paper, not simply a summary of their reading. Therefore, as in any academic writing, students should not merely copy information from another author or from an Artificial Intelligence writing technology but use evidence to support the contentions they have drawn from their findings and critically analyze related literature. This paper must meet APA requirements of format and style. Students must cite the sources of all ideas, facts, and information used that are not their own, even if they have put the information into their own words. Failure to do so is a violation of the Academic Integrity Policy, even if the oversight is unintentional.

Grading Components	% of Grade
Organization and coherence	20%
Evidence and support	30%
Analysis and use of course concepts	30%
Style, mechanics and APA (citations,	20%
references, formatting)	
TOTAL	100%

Course Policies

Late Assignments

Per School of Health and Social Sciences policy, undergraduate students are required to submit all assignments by the due dates stated in the syllabus. A late assignment is one that is submitted after the due date and time or after any extension has expired.

If circumstances prevent a student from meeting the due date, the student is obliged to contact the instructor and request an extension at least 48 hours prior to the date the assignment is due. Emergency situations will be considered on a case-by-case basis. Being busy, pressured with outside work, or having competing academic commitments are not valid reasons to grant extensions. A student who receives an extension in advance of the due date and abides by the agreement with the instructor is not subject to late penalties.

Without prior arrangement with the instructor, students who submit assignments late will receive a 15 percent deduction in grade each day or part of the day that the assignment is late. For example, if the assignment is submitted two days late, 30 percent of the grade will be deducted. No late submission is accepted beyond 48 hours past the final day of the course, without instructor approval. Coursework received after one week (seven days) will not be graded and will receive a zero grade.

Participation

Participation is an active engagement in class discussions and activities in the form of sharing new ideas, examples and resources, as well as constructive disagreement and incorporation of course materials and concepts in comments. This requires frequent monitoring of the discussion forum, timely responses, integration of course material and other sources, and ongoing conversations that extend, modify, and add to understanding, creating a vibrant learning community.

Participation through course activities and discussions to exchange knowledge, ideas, and thoughts is an integral, mandatory part of this course. It enhances the student's learning process and experience in this course. Lack of participation will result in a reduction in grade (see grading rubric).

Professional Writing

Assignments require error-free writing that uses standard English conventions and logical flow of organization to address topics clearly, completely, and concisely. CityU requires the use of APA style.

University Policies

Students are responsible for understanding and adhering to all of City University of Seattle's academic policies. The most current versions of these policies can be found in the <u>University Catalog</u> that is linked from the CityU Web site.

Antidiscrimination

City University of Seattle and its staff and faculty are committed to supporting our students. We value equity, diversity, and inclusion as a way of life as well as the educational opportunities it provides. City U will not tolerate any form of discrimination based on race, color, ethnicity, sexual orientation, gender identification, socioeconomic status, or religious values. If you have experienced any discrimination based on any of the above, we encourage you to report this to the University. Please report this to your instructor. If you do not feel safe reporting this to your instructor, please report to the Provost or to the Vice President of Student Affairs.

Non-Discrimination & Prohibition of Sexual Harassment

City University of Seattle adheres to all federal, state, and local civil rights laws prohibiting discrimination in employment and education. The University is committed to ensuring that the education environment is bounded by standards of mutual respect and safety and is free from discriminatory practices.

In the U.S., the University is required by Title IX of the Education Amendments of 1972 to ensure that all of its education programs and activities do not discriminate on the basis of sex/gender. Sex include sex, sex stereotypes, gender identity, gender expression, sexual orientation, and pregnancy or parenting status. Sexual harassment, sexual assault, dating and domestic violence, and stalking are forms of sex discrimination, which are prohibited under Title IX and by City University of Seattle policy. City University of Seattle also prohibits retaliation against any person opposing discrimination or participating in any discrimination investigation or complaint process internal or external to the institution. Questions regarding Title IX, including its application and/or concerns about noncompliance, should be directed to the Title IX Coordinator. For a complete copy of the policy or for more information, visit the CityU website or contact the Title IX Coordinator.

In Canada, in compliance with the British Columbia Human Rights Code, the Alberta Human Rights Act, WorksafeBC, and the Workers' Compensation Board of Alberta, the University believes that its environment should at all times be supportive and respectful of the dignity and self-esteem of individuals. Discrimination, harassment and bullying conduct, whether through person-to-person behaviour or via electronic communications such as email or social media is not acceptable and will not be tolerated. As an educational institution, it is our responsibility to cultivate an environment of excellence, equity, mutual respect and to recognize the value and potential of every individual. The University will take all necessary steps to meet or exceed the requirements of the law to prevent discrimination, harassment and bullying. The Respectful Workplace Policy for the prevention of discrimination, harassment and bullying policy and procedure can be found at CityU in Canada website.

Religious Accommodations

City University of Seattle has a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The University's policy, including more information about how to request an accommodation, is available in the University Catalog and on the my.cityu.edu student portal. Accommodations must be requested by the 20% mark of this course (e.g. day 14 of a ten-week course, day 7 of a 5-week course) using the Religious Accommodations Request Form found on the student dashboard in the my.cityu.edu student portal.

Academic Integrity

Academic integrity in students requires the pursuit of scholarly activity that is free from fraud, deception and unauthorized collaboration with other individuals. Students are responsible for understanding CityU's policy on academic integrity and adhering to its standards in meeting all course requirements. A complete copy of this policy can be found in the University Catalog under Student Rights and Responsibilities on the page titled Academic Integrity Policy.

Attendance

Students taking courses in any format at the University are expected to be diligent in their studies and to attend class regularly.

Regular class attendance is important in achieving learning outcomes in the course and may be a valid consideration in determining the final grade. For classes where a physical presence is required, a student has attended if they are present at any time during the class session. For online classes, a student has attended if they have posted or submitted an assignment. A complete copy of this policy can be in the University Catalog under Student Rights and Responsibilities on the page titled Attendance.

Final Assignment Due Date

Final assignments for each class at CityU must be due on or before the final date of the course as indicated in the university's course information system. Due dates that extend beyond the final date of the course may negatively impact tuition funding for students.

Support Services

Disability Services Accommodations Statement

Students with a documented disability who wish to request academic accommodations are encouraged to contact Disability Support Services to discuss accommodation requests and eligibility requirements. Please contact Disability Support Services at disability@cityu.edu or 206.239.4752 visit the Disability Support Services page in the my.cityu.edu portal or in the Start Your Course Here module in your course under Support Services. Confidentiality will be observed in all inquiries. Once approved, information about academic accommodations will be shared with course instructors.

Library Services

CityU librarians are available to help students find the resources and information they need to succeed in this course. Contact a CityU librarian through the <u>Ask a Librarian</u> service, or access <u>library resources and services online</u>, 24 hours a day, seven days a week.

Smarthinking Tutoring

CityU students have access to free online tutoring offered through Smarthinking, including writing support, from certified tutors 24 hours a day, seven days a week. Contact CityU's Student Support Center at mycityusupport@cityu.edu to request a user name and password.

Course Rubrics

Course Activities

	Below Standard	Approaching Standard	At Standard	Exceeds Standard
Percentage scale:	0-61%	62 - 74%	75 - 91%	92.00- 100%
Scaled score	0.0 - 0.6	0.7 - 1.9	2.0 - 3.6	3.7 - 4.0
Quality of responses – 25%	Superficial and undeveloped analysis; No insight or thoughtfulnes s; Off topic; Never addresses instructor's comments to original posts; No connections are made to previous and current sessions' concepts and materials; No references to readings; Obvious	Scattered and poorly developed analysis rarely supported by academically appropriate resources; Few, if any new ideas or connections made to previous and current sessions' concepts and materials; Mostly anecdotal examples with no references to readings; Rephrases or	Generally competent analysis, supported by various academically appropriate resources; Some new ideas or connections to previous and current sessions' concepts and materials; Most of the time addresses instructor's comments to original posts; References	Rich in content, thoughtful and insightful problem analysis well supported by various academically appropriate resources; Detailed new ideas with connections made to previous sessions and/or reallife situations; Always addresses instructor's comments to
	Obvious grammatical or stylistic	Rephrases or summarizes other	References materials provided by	comments to original posts; References

	errors, making understanding difficult.	postings; Sometimes addresses instructor's comments to original posts; Serious grammatical errors interfering with content.	instructor; Grammatical or stylistic errors do not interfere with content.	materials, other than those provided by instructor.
Quantity of responses – 25%	Some, or all, required quality posts are missing.	Initial post and fewer than minimum number of required quality posts.	Required minimum number of quality posts.	Exceeds minimum number of required quality posts.
Timeliness of responses – 25%	All posts submitted at the last minute without allowing for response time.	Posts submitted on less than three days of the discussion time.	Posts submitted on three different days of the discussion time.	Posts submitted on more than three days of the discussion time.
Style and mechanics (25%)	Obvious grammatical or stylistic errors, making understanding difficult style. Uses casual language. Includes unnecessary information. Does not	Serious grammatical errors interfering with content. Mostly uses concise language and includes very little unnecessary information. Attempts to	Several grammatical or stylistic errors. Uses concise language with no unnecessary information. Almost always references credible	Few grammatical or stylistic errors. Uses concise and compelling language with no unnecessary information. Transitions in writing and flow are

reference	reference	sources to	smooth and
credible	credible	support ideas	clear. Always
sources to	sources to		references
support ideas	support ideas		credible
			sources to
			support ideas

Planets in Our Solar System Presentation

	Below Standard	Approaching Standard	At Standard	Exceeds Standard
Percentage scale:	0.00 - 74.99%	75-00 - 81.99%	82.00 - 91.99%	92.00- 100%
Scaled score	0.0 - 1.9	2.0 - 2.6	2.7 - 3.6	3.7 - 4.0
Organization and coherence (20%)	Is unclear with no or minimal organization, so ideas appear to be arranged in a random order. Few or inappropriate transitions between slides and ideas are not developed clearly. Does not appropriately respond to the assignment.	Minimal organization so ideas appear as a list. Transitions between ideas are minimal, and development of ideas may lack coherence. Not all aspects of the assignment are addressed.	Follows a logical organization. Ideas are developed but not all pertain directly to the topic. Topic is communicated clearly but not completely, and most or all aspects of the assignment are addressed.	Uses logical structure with introduction, body, and conclusion. Sophisticated development of one idea to another, and audience is guided through the progression of ideas. Clearly communicated topic, and all aspects of assignment are addressed.
Content accuracy and support (25%)	Content includes many inaccuracies. Does not attempt to support the topic, or consistently includes	Content may include some inaccuracies. Support is minimal and may be irrelevant at times.	Content is accurate and appropriate, but support could be more fully developed.	Content is accurate, appropriate, and effectively supported by reliable sources.

	irrelevant details.			
Analysis (25%)	Superficial and poorly developed analysis. Uses few sources, may misunderstand them, and lacks critical thinking. No or minimal reliable references.	Analysis lacks depth and detail. Shows basic understanding of sources but does not critically evaluate them. Incorporates few or no reliable references.	Analysis is relevant and reflects insight but is not fully developed. Shows careful reading of sources but little or no critical evaluation. Incorporates adequate or minimum number of reliable references to support analysis.	Analysis is relevant and insightful. Critically evaluates sources. Incorporates numerous or more than the minimum number of reliable references required to support analysis.
Visual design (10%)	Visuals are unattractive, unclear, and/or distracting. Visuals are unrelated to the topic and make little or no use of color, space, or the capabilities of the application. Formatting makes it very difficult to read the material.	Visuals are sometimes unattractive, unclear and/or distracting and are weakly related to the topic. Visuals make use of space, color and the capabilities of application in ways that are unwise and/or distracting. Formatting complements the content but	Visuals are attractive, informative and engaging and reinforce and support the topic. Visuals make good use of color, space and the capabilities of the application without overwhelming the audience. Formatting complements the content.	Visuals are attractive, informative, engaging and creatively designed/appli ed. They reinforce, support and enhance understanding of the topic, and they make good use of color and space that maximizes the capabilities of the application without overwhelming

		is often hard to read.		the audience. Formatting enhances readability and content.
Style, delivery, and APA (20%)	Contains spelling, punctuation, and/or grammatical errors, so understanding is difficult. Misuses words or uses words that are too vague and abstract or too personal and specific for the topic. Format and references are incomplete and have many errors in APA style.	Contains spelling, punctuation, and/or grammatical errors which may temporarily confuse the audience but does not generally impede overall understanding. Is wordy, unfocused, repetitive, or confusing. Uses relatively vague or general words and sometimes inappropriate words. Format and references have some errors in APA style and/or are incomplete.	Contains spelling, punctuation, and/or grammatical errors, but does not impede understanding. Language is generally clear, well structured, and focused, but some may be awkward or ineffective. Generally, uses words accurately and effectively, but sometimes may be too general. Format and references are complete and have few errors in APA style.	Almost entirely free of spelling, punctuation, and/or grammatical error. Language is varied, clearly structured, carefully focused, and fit the assignment's purpose and audience. Words chosen for their precise meaning and an appropriate level of specificity is used. Format and references are in correct APA style and are complete.

Our Place in the Universe Project

	Below Standard	Approaching Standard	At Standard	Exceeds Standard
Percentage scale:	0- 61%	62 - 74%	75 - 91%	92.00- 100%

Scaled score	0.0 - 0.6	0.7 - 1.9	2.0 - 3.6	3.7 - 4.0
Organization and coherence (20%)	Is unclear with no or minimal organization, so ideas appear to be arranged in a random order. Few or inappropriate transitions between paragraphs, and ideas are not developed clearly.	Minimal organization so ideas appear as a list. Transitions between ideas are minimal, and development of ideas may lack coherence.	Follows a logical organization. Ideas are developed but not all pertain directly to the topic. Topic is communicated clearly but not completely.	Follows a logical organization. Sophisticated development of one idea to another, and reader is guided through the progression of ideas. Clearly communicated topic.
Project engagement and completion (30%)	Summary of findings or experience shows very little engagement in the project. Does not appropriately respond to the assignment.	Summary of findings or experience is minimal and shows a lack of meaningful engagement in the project. Not all aspects of the assignment are addressed.	Sufficient summary of findings or experience shows engagement in the project. All aspects of the assignment are addressed.	Thorough summary of findings or experience shows active engagement in the project. All aspects of the assignment are addressed.
Analysis and use of course concepts	Does not attempt to explain how the project findings relate to implications for humanity. Superficial and poorly developed analysis. Little or no connections are made to course concepts. Uses	Analysis of project findings and their relevance to implications on humanity is inaccurate at times. Some new ideas and insight but lacks depth and detail. Incorporates some course concepts, but	Analysis explains how project findings relate to their implications on humanity. Analysis reflects insight but is not fully developed. Incorporates many course concepts but sometimes	Analysis shows a strong relationship between project findings and their implications on humanity. Analysis is insightful and original. Incorporates course concepts

	few sources, may misunderstand them, and lacks critical thinking. Incorporates no or minimal reliable references to support analysis.	accuracy and development are not consistent. Incorporates few or no reliable references to support analysis.	does not develop them. Incorporates adequate or minimum number of reliable references to support analysis.	accurately, consistently, and frequently. Incorporates numerous or more than the minimum number of reliable references required to support analysis.
Style, mechanics, and APA (citations, references, formatting) (20%)	Contains spelling, punctuation, and/or grammatical errors, so understanding is difficult. Contains numerous awkward or ungrammatical sentences, and sentence structure is simple or monotonous. Misuses words or uses words that are too vague and abstract or too personal and specific for the topic. Format and references are incomplete and have many errors in APA style.	Contains spelling, punctuation, and/or grammatical errors which may temporarily confuse the reader but does not generally impede the overall understanding. Sentence structure is generally correct but may be wordy, unfocused, repetitive, or confusing. Uses relatively vague or general words and sometimes inappropriate words. Format and references have some errors in APA style and/or is incomplete.	Contains spelling, punctuation, and/or grammatical errors, but does not impede understanding. Sentences are generally clear, well structured, and focused, but some may be awkward or ineffective. Generally, uses words accurately and effectively, but sometimes may be too general. Format and references are complete and have few errors in APA style.	Almost entirely free of spelling, punctuation, and/or grammatical error. Sentences are varied, clearly structured, carefully focused, and fit the assignment's purpose and audience. Words chosen for their precise meaning and an appropriate level of specificity is used. Format and references are in correct APA style and are complete.

Big Questions Reflection Paper

	Below Standard	Approaching Standard	At Standard	Exceeds Standard
Percentage scale:	0- 61%	62 - 74%	75 - 91%	92.00- 100%
Scaled score	0.0 - 0.6	0.7 - 1.9	2.0 - 3.6	3.7 - 4.0
Organization and coherence (20%)	Is unclear with no or minimal organization, so ideas appear to be arranged in a random order. Few or inappropriate transitions between paragraphs, and ideas are not developed clearly. Does not appropriately respond to the assignment.	Minimal organization so ideas appear as a list. Transitions between ideas are minimal, and development of ideas may lack coherence. Not all aspects of the assignment are addressed.	Follows a logical organization. Ideas are developed but not all pertain directly to the topic. The topic is communicated clearly but not completely, and most or all aspects of the assignment are addressed.	Uses logical structure with introduction, body, and conclusion. Sophisticated development of one idea to another, and reader is guided through the progression of ideas. Clearly communicated topic, and all aspects of assignment are addressed.
Evidence and support (30%)	Does not attempt to use evidence to support topic, or evidence provided does not support topic. Uses irrelevant details or little supporting evidence, generalizing and	Use of evidence is minimal but does support the topic. Often supports points through generalization, and examples are not relevant or explained.	There is evidence to support almost every point. Offers support but requires more interpretation and explanation of the evidence.	Every point is clearly supported by strong evidence. Uses evidence appropriately and effectively.

	providing more of a summary than an analysis.			
Analysis and use of course concepts (30%)	Does not attempt to explain how the evidence relates to the topic. Superficial and poorly developed analysis. Little or no connections are made to course concepts. Uses few sources, may misunderstand them, and lacks critical thinking. No or minimal scholarly references.	Analysis of the evidence stretches its meaning to support the topic. Some new ideas and insight but lacks depth and detail. Incorporates some course concepts, but accuracy and development are not consistent. Shows basic understanding of sources but does not critically evaluate them. Incorporates few or no scholarly references.	Analysis explains how the evidence supports the topic in most cases. Analysis reflects insight but is not fully developed. Incorporates many course concepts but sometimes does not develop them. Shows careful reading of sources but little or no critical evaluation. Incorporates adequate or minimum number of scholarly references to support analysis.	Analysis shows a strong relationship between the evidence and the topic. Analysis is insightful and original. Incorporates course concepts accurately, consistently, and frequently. Critically evaluates sources. Incorporates numerous or more than the minimum number of scholarly references required to support analysis.
Style, mechanics, and APA (citations,	Contains spelling, punctuation, and/or grammatical errors, so understanding is difficult. Contains	Contains spelling, punctuation, and/or grammatical errors which may temporarily confuse the	Contains spelling, punctuation, and/or grammatical errors, but does not impede understanding	Almost entirely free of spelling, punctuation, and/or grammatical error. Sentences are varied, clearly

references, formatting)

(20%)

numerous awkward or ungrammatical sentences, and sentence structure is simple or monotonous. Misuses words or uses words that are too vague and abstract or too personal and specific for the topic. Format and references are incomplete and have many errors in APA style.

reader but does not generally impede the overall understanding. Sentence structure is generally correct but may be wordy, unfocused, repetitive, or confusing.

Uses relatively vague or general words and sometimes inappropriate words. Format and references have some errors in APA style and/or is incomplete.

. Sentences are generally clear, well structured, and focused, but some may be awkward or ineffective. Generally, uses words accurately and effectively, but sometimes may be too general.

Format and references are complete and have few errors in APA style.

structured, carefully focused, and fit the assignment's purpose and audience. Words chosen for their precise meaning and an appropriate level of specificity is used. Format and references are in correct APA style and are complete.