CityUniversity of Seattle | CityU.edu

Syllabus

# AI 610: Agent Based Systems

## School of Technology & Computing

3 Credits, Graduate Course
Grading Type: Decimal
Pre-requisite, Co-requisite: None
Summer 2022

*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 *Faculty Information* in the online course menu.

# Contact Information

Contact information for instructors is found under *Faculty Information* in the online course menu.

**Email**: [first name] [last name]
Phone: [xxx-xxx-xxxx]
Office Hours and Response Time: [I am available through MS Teams <day> and <day> between <xx>-<xx> pm PTS. I will respond within 24 hours. I will grade within 3 business days after the due date.]
Bio: (keep images under 300px wide)

# Course Description

This course provides students with a comprehensive introduction to agents and multi-agent systems. Topics include agent architectures, distributed AI and agents, intelligent agents, multi-agent systems, agent interaction, communication, and distributed decision-making models. Students evaluate current trends in intelligent agents and their use cases in business and industry and non-profit organizations. Students illustrate their knowledge designing a real-world application developed in a cloud-based framework SDK.

# Course Resources

Required and recommended resources to complete coursework and assignments are found on the course Reading List. The reading list can be found under Course Information in Desires to Learn LMS, as well as from the library homepage.

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 at no cost to students.

Students in Canada will see required resources they need to purchase tagged “Purchase from the Canadian Bookstore.” Students outside the U.S. and Canada should contact their advisor or textbook coordinator for additional information.

# Course Outcomes

At the end of this course, students:

1. Explain basic concepts of agents and intelligent agent systems both from theoretical and practical point of view.
2. Identify basic methodologies of single and multi-agent intelligent systems.

3. Apply principles and methods of intelligent agents to a small-scale practical problem.
4. Analyze methods, techniques, and tools for the use of intelligent agent-based systems.
5. Evaluate current trends in intelligent agents and their use cases in business and industry and non-profit organizations.
6. Design and implement an application of an agent-based system using cloud AI framework and services.

# Grading Scale

The grades earned for the course will be calculated using City University of Seattle's decimal grading system, found in the current University Catalog (https://www.cityu.edu/catalog/).

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 each assignment's rubric before completing their work to understand how it will be assessed.

| OVERVIEW OF REQUIRED ASSIGNMENTS | % OF FINAL GRADE | POINTS |
|---|---|---|
| ***Instructor Determined Assignments*** | ***30%*** | |
| The Muddiest Point (MP) | 5% | 50 = 5 points * 10 modules |
| Concept Test (CT) | 5% | 50 = 5 points * 10 modules |
| Discussion Board (DB) | 10% | 100 = 10 points * 10 modules |
| Knowledge Check (KC) | 10% | 100 = 10 points * 10 modules |
| ***Major Assignments*** | ***70%*** | |
| Hands-On Skills (HOS) | 20% | 200 = 20 points * 10 modules |
| Virtual Labs (VL) | 30% | 300 = 30 points * 10 modules |
| Team Project (TP) | 20% | Proposal: 30 points<br>Progress: 70 points<br>Final Report: 70 points<br>Final PPT: 30 points<br>Subtotal: 200 points |
| **TOTAL** | **100%** | **1,000 points** |

# Course Assignments and Grading

The instructor will provide grading rubrics that will explain how this assignment will be graded.

**The Muddiest Point (MP)**

This activity ensures students engage in the course and understand basic concepts of intelligent agents both from theoretical and practical point of view. The instructor uses the MP to assess how students understand the required readings. Students submit the Muddiest Point (MP) activity before class (or by Wed if class is fully online). The instructor also uses the MP to

customize the lecture scope to implement Just-in-Time Teaching (JiTT). The MP consists of writing a brief reflective essay (<= 50 words) identifying the most confusing part (i.e., the MP) of the content covered in the upcoming module. If a student understands all concepts, the student needs to explain the most exciting aspect. There is one multiple-choice question from the required reading to demonstrate that the student understands the required readings.

| ***MP Criteria*** | ***% of Grade*** |
|---|---|
| Participation | 80% |
| Correctness | 20% |
| **TOTAL** | **100%** |

**Concept Test (CT)**

The concept test reinforces what is learned in lectures and readings. Students reflect on concepts and methodologies of single and multi-agent systems and explain their uses in organizations. The instructor presents specific problems; after reflecting on the problem, students submit their responses. The instructor provides feedback. Students discuss their thought process and solution with a peer utilizing the discussion board. Instructor reviews the responses and provides feedback.

| ***CT Criteria*** | ***% of Grade*** |
|---|---|
| Engagement | 100% |
| **TOTAL** | **100%** |

**Discussion Board (DB)**

Each week the instructor posts a topic related to analyzing methods, techniques, and tools for the use of intelligent agents to solve current and future problems. Students engage in discussion demonstrating their knowledge of the concepts covered each week and how they are applied and integrated in developing back-end applications.

All classes are required to use the Discussion Board. Participation through DB is an integral part of this course. It is defined as active engagement in a discussion or other activity. Instructors determine the type of activities and their due dates; moreover, different DB activities have different substance and length guidelines. The instructor provides specific instructions to students.

A student posts an answer to a weekly discussion topic in Discussion Board. The student also posts a response to two other students' posts by the end of each module. Comments and questions should be clear and thoughtful, with correct grammar, spelling, and punctuation. The instructor grades the quality of the discussion postings on both content and response. Questions or comments specifically for the instructor should be emailed directly to the instructor.

Although the DB postings' tone can be informal, the instructor expects the content to be on a professional level. Student comments and questions for discussion should be clear and thoughtful, with correct grammar, spelling, and punctuation. As with written assignments, the discussion postings' quality is graded on both content and presentation.

| ***DB Criteria*** | ***% of Grade*** |
|---|---|
| Participation | 50% |
| Writing | 50% |
| **TOTAL** | **100%** |

**Hands-On Skills (HOS)**

The instructor assigns Hands-on Skill exercises to practice using tools and writing programs currently used to develop intelligent agents. These exercises prepare students for the Virtual Labs and the Team project. Students can work in pairs in class, or individually online.

| ***HOS Criteria*** | ***% of Grade*** |
|---|---|
| Practice Exercise | 80% |
| Engagement | 20% |
| **TOTAL** | **100%** |

**Virtual Labs (VL)**

Students complete a set of Virtual Labs using environments such as the Azure AI cloud computing environment and apply principles and methods of intelligent agents to small-scale practical problems. The labs prepare students for their team project. The labs must be individually performed.

Programs should deliver correct answers to all valid input and produce comprehensible error messages on invalid input. Programs also run correctly on all test data given within a reasonable amount of time. Students document their programs following best practice ensuring others understand the logic of the applications.

| ***VL Criteria*** | ***% of Grade*** |
|---|---|
| Accuracy | 80% |
| Writing | 20% |
| ***TOTAL*** | ***100%*** |

**Knowledge Check (KC)**

Students demonstrate their understanding of intelligent agent systems and their application in business and industry through weekly quizzes. These weekly quizzes focus on the underlying principles and concepts rather than memorization to solve the quizzes.

| ***KC Criteria*** | ***% of Grade*** |
|---|---|
| Correctness | 100% |
| **TOTAL** | **100%** |

**Team Project (TP)** – **Design and implement an agent-based system using cloud AI framework and services.**

Using the knowledge acquired through lectures, practical tools implementation and exercises in HOSs and VLs, students implement an agent-based conversational AI application using a cloud framework and services. Students research approaches to orchestrate conversational AI, identify a case use, future applications, and implement a prototype. Prototypes need to be tested, and if feasible, students update the prototype or make recommendations for future updates and implementations. Students identify guiding principles for responsible AI such as fairness, inclusiveness, transparency, accountability, privacy, and security. Proposed use cases need to be approved by the instructor.

A team proposed project must be first approved by the instructor. Each project consists of four elements: a proposal, a progress report, a final report of 6-7 pages, and a final presentation with slides. Templates are provided for each element by the instructor. Students add elements to their project weekly, incorporating feedback from their instructor.

Students use evidence to support the contentions they have drawn from their findings and critically analyze their cited resources. Resources should include assigned course materials and additional sources students have investigated and researched not assigned by the professor. Students use technical writing style of reporting using APA formatting for citations and references.

The instructor provides specific team project requirements in the course shell.

**TP Report**

The students submit a report formatted based on a template provided by the instructor; students can use their own format, though all components included in the template, as outlined in the agenda, need to be covered. Students improve their writing iteratively and incrementally every week based on the feedback received from the instructor, adding new required sections to the existing paper with every deliverable.

The final report is the culmination of applied research and activities conducted throughout the quarter. The final report/paper provides a detailed problem and its solution encountered in organizations.

**Grading for TP01 and TP02**

| ***TP01 & 02 Criteria*** | ***% of Grade*** |
|---|---|

| | |
|---|---|
| Structure | 20% |
| Content | 30% |
| Writing | 30% |
| Reference | 10% |
| Collaboration | 10% |
| **TOTAL** | 100% |

**Rubric for TP03**

| | ***TP03 Criteria*** | ***Outcome*** | ***% of Grade*** |
|---|---|---|---|
| Agent Based Systems (20%) | | | |
| 1 | Agent Based Systems | Apply the knowledge to identify intelligent agent-based systems that are used today and in near future. | 20% |
| Critical Thinking (60%) | | | |
| 2 | Issue | Issue is stated and described thoroughly so that it is understood fully. | 20% |
| 3 | Evidence | Information is taken from source(s) appropriate to the scope with enough interpretation and evaluation to develop a comprehensive analysis or synthesis, and expert opinions are thoroughly scrutinized. | 10% |
| 4 | Context and Awareness | Thoroughly analyzes assumptions and biases, carefully evaluating contextual relevance when presenting a position. | 20% |
| 5 | Conclusions | Conclusions are logical and reflect an informed evaluation of evidence and perspectives in priority order. | 10% |
| Collaboration (20%) | | | |
| 6 | Teamwork | Works effectively on diverse, global and/or distributed teams. | 10% |
| 7 | Knowledge of Cultural Frameworks | Demonstrates sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices. | 5% |
| 8 | Openness to Cultural Differences | Demonstrates sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices. | 5% |
| | **TOTAL** | | 100% |

**TP Presentation**
The Team reports research outcomes, development, or other project efforts to an academically appropriate committee in a public forum. The nature of the presentation content determines the specific makeup of the audience. The Team chooses the format of the presentation in consultation with the advisor. The layout and design must be appropriate and adequate to represent the outcome of the effort. While students must make some form of a visual presentation, the presentation of the results may include publishing in a refereed publication, publication in a trade or popular magazine or journal, broadcast in an appropriate medium, or, in exceptional cases, limited dissemination within a closed community.

Each Team has 15 minutes for a presentation and 5 minutes for questions and answers. Each presenter must keep the total presentation time limit strictly.

| ***TP Presentation Criteria*** | ***% of Grade*** |
|---|---|
| Structure | 20% |
| Visual Presentation | 30% |
| Verbal Quality & Engagement | 30% |
| Collaboration | 20% |
| **TOTAL** | 100% |

# Course Policies

Course policies on Late Assignments, Participation, and Professional Writing are found under Course Information in the online course menu. Students are responsible for reviewing and applying these policies while enrolled in this course.

# University Policies

You 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 University Catalog 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 Dr. Scott Carnz, Provost or to the Vice President of Student Affairs, Melissa Mecham.

**Non-Discrimination & Prohibition of Sexual Misconduct**
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 https://my.cityu.edu/titleix 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 https://www.cityu.edu/discover-cityu/about-cityu/ under the Policies section or at https://www.cityuniversity.ca/about/ .

**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 in the section titled *Academic Integrity Policy* under *Student Rights & Responsibilities*.

**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 found in the University Catalog in the section titled Attendance under Student Rights & Responsibilities.

**Final Assignments 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

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 or visit the Disability Support Services page in the my.cityu.edu portal. 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 Ask a Librarian service, or access library resources and services online, 24 hours a day, seven days a week.

**Smarthinking Tutoring**
CityU students have 24/7 access to free online tutoring offered through Smarthinking, including writing support, from certified tutors. Contact CityU's Student Support Center at mycityusupport@cityu.edu to request a username and password.

## Rubrics

### Muddiest Points Rubric Details

| 100% | Levels of Achievement | | | |
|---|---|---|---|---|
| **Criteria** | **Below Standard** | **Approaching Standard** | **At Standard** | **Exceeds Standard** |
| **Graduate Percentage Scale** | **0%-74.99%** | **75.00%-84.99%** | **85.00%-91.99%** | **92%-100%** |
| **Participation**<br><br>**Weight 80%** | No submission | Late submission | On-time submission | On-time submission clearly explaining the muddiest point of the module. |
| **Correctness**<br><br>**Weight 20%** | Answers none or 74.99% less of the questions correctly. | Answers 75.00% above or 84.99% less of the questions correctly. | Answers 85.00% above or 91.99% less of the questions correctly. | Answers 92.00% above or all the questions correctly. |

### Discussion Board (DB) Rubric Details

| 100% | Levels of Achievement | | | |
|---|---|---|---|---|
| **Criteria** | **Below Standard** | **Approaching Standard** | **At Standard** | **Exceeds Standard** |
| **Graduate** | **0%-74.99%** | **75.00%-84.99%** | **85.00%-91.99%** | **92%-100%** |
| **Participation**<br><br>**Weight 50%** | Submission does not post answer and responses. | Submission answers the question but doesn't post responses to other peers. | Submission answers the question and posts responses to only one student. | Submission answers the question and posts responses to at least two students. |
| **Writing**<br><br>**Weight 50%** | No submission. | Submission posts responses with spelling errors, grammar errors, and punctuations. | Submission is coherent with only two spelling or grammar errors. | Submission is coherent and grammatically correct with no errors. |

### Concept Test (CT) Rubric Detail

| 100% | Levels of Achievement | | | |
|---|---|---|---|---|
| **Criteria** | **Below Standard** | **Approaching Standard** | **At Standard** | **Exceeds Standard** |
| **Graduate Percentage Scale** | **0%-74.99%** | **75.00%-84.99%** | **85.00%-91.99%** | **92%-100%** |
| **Engagement** | Submission does not show an | Submission shows an answer with | Submission includes an | Submission includes an |

| | | | | |
|---|---|---|---|---|
| **Weight 100%** | answer or shows an answer without justification. | justification, but there is no peer student engagement. | answer, justification, and peer engagement. | answer, justification, and peer engagement with critical thoughts. |

**Hands-On Skill (HOS)**

| 100 | Levels of Achievement | | | |
|---|---|---|---|---|
| **Criteria** | **Below Standard** | **Approaching Standard** | **At Standard** | **Exceeds Standard** |
| **Graduate Percentage Scale** | **0%-74.99%** | **75.00%-84.99%** | **85.00%-91.99%** | **92%-100%** |
| **Skill** Exercise<br><br>**Weight 70%** | Submission does not show answers or shows answers without evidence. | Submission shows answers with minimal evidence. | Submission shows answers with some evidence. | Submission shows answers with full evidence. |
| **Engagement**<br><br>**Weight 20%** | Student does not engage in the exercise. | Student engages minimally in the exercise. | Student engages fully in the exercise. | Student mentors the other student to learn and succeed. |
| **Correctness**<br><br>**Weight 10%** | Answers none or 74.99% less of the questions correctly. | Answers 75.00% above or 84.99% less of the questions correctly. | Answers 85.00% above or 91.99% less of the questions correctly. | Answers 92.00% above or all the questions correctly. |

**Virtual Labs (VL)**

| 100% | Levels of Achievement | | | |
|---|---|---|---|---|
| **Criteria** | **Below Standard** | **Approaching Standard** | **At Standard** | **Exceeds Standards** |
| **Graduate Percentage Scale** | **0%-74.99%** | **75.00%-84.99%** | **85.00%-91.99%** | **92%-100%** |

| | | | | |
|---|---|---|---|---|
| **Accuracy**<br><br>**Weight 80%** | Activities not completed, not executable, or not submitted | The 68.75% - 86.24% of all required activities are partially completed and executable, but errors in activities. | The 86.25% - 93.74% of all required activities are completed and executable without any errors. | All required activities are completed and executable without any errors. |
| **Writing**<br><br>**Weight 20%** | No submission. | Submission posts understandings and findings with spelling errors, grammar errors, and punctuations. | Submission is coherent and only two spelling or grammar errors. | Submission is coherent and only two spelling or grammar errors. |

## Knowledge Check (KC) Rubric Details

| 100% | Levels of Achievement | | | |
|---|---|---|---|---|
| **Criteria** | **Below Standard** | **Approaching Standard** | **At Standard** | **Exceeds Standard** |
| **Graduate Percentage Scale** | **0%-74.99%** | **75.00%-84.99%** | **85.00%-91.99%** | **92%-100%** |
| **Correctness**<br><br>**Weight 100%** | Answers none or 74.99% less of the questions correctly | Answers 75.00% %above or 84.99% less of the questions correctly | Answers 85.00% above or 91.99% less of the questions correctly | Answers 75.00 above or 84.99% less of the questions correctly |

### Team Project (TP) Rubric Details

| | 100% | Levels of Achievement | | | |
|---|---|---|---|---|---|
| | **Criteria** | **Below Standard** | **Approaching Standard** | **At Standard** | **Exceeds Standard** |
| | **Graduate Percentage Scale** | **0%-74.99%** | **75.00%-84.99%** | **85.00%-91.99%** | **92%-100%** |
| 1 | **Agent Based Systems**<br><br>Weight 20% | Recalls aspects of intelligent agent-based system, and it uses in applications. | Understands the design, development, and deployment of intelligent agent-based system. | Applies design, development, and deployment of intelligent agent-based system applications. | Evaluates the design, development, and deployment of intelligent agent-based system |

| | | | | | |
|---|---|---|---|---|---|
| 2 | **Issue**<br><br>Weight 20% | Issue is stated without clarification or description. | Issue is stated but leaves some elements unaddressed, such as background, context, terms, boundaries, or ambiguities. | Issue is stated, described, and clarified so that understanding is not impeded by omissions. | Issue is stated and described thoroughly so that it is understood fully. |
| 3 | **Evidence**<br><br>Weight 10% | Information is taken from source(s) appropriate to the scope without any interpretation or evaluation, and expert opinions are taken as fact without question. | Information is taken from source(s) appropriate to the scope with some interpretation and evaluation, but not enough to develop a coherent analysis or synthesis, and expert opinions are taken as fact with little questioning. | Information is taken from source(s) appropriate to the scope with enough interpretation and evaluation to develop a coherent analysis or synthesis, and expert opinions are subject to questioning | Information is taken from source(s) appropriate to the scope with enough interpretation and evaluation to develop a comprehensive analysis or synthesis, and expert opinions are thoroughly scrutinized. |
| 4 | **Context and Awareness**<br><br>Weight 20% | Emerging awareness of assumptions and biases with limited identification of contextual relevance when presenting a position. | Questions some assumptions and biases with a limited range of contextual relevance when presenting a position. | Analyzes assumptions and biases and evaluates a range of contextual relevance when presenting a position. | Thoroughly analyzes assumptions and biases, carefully evaluating contextual relevance when presenting a position |
| 5 | **Conclusions**<br><br>Weight 10% | Conclusions are inconsistently tied to some of the information discussed and is overly simplistic. | Conclusions are logically tied to information that support a desired conclusion. | Conclusions are logically tied to a range of information and include opposing points of view. | Conclusions are logical and reflect an informed evaluation of evidence and perspectives in priority order |
| 6 | **Teamwork**<br><br>Weight 10% | Recalls aspects of how to work effectively on diverse, global and/or distributed teams. | Understands aspects of how to work effectively on diverse, global and/or distributed teams. | Applies effective strategies for working on diverse, global and/or distributed teams. | Evaluates effective strategies for working on diverse, global and/or distributed teams. |
| 7 | **Knowledge of Cultural Frameworks** | State some elements that are important to | Describe and explain some elements that are | Argue and defend key elements that are important to | Analyze sophisticated understanding of |

| | | | | | |
|---|---|---|---|---|---|
| | Weight 5% | members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices. | important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices. | members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices. | the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices. |
| 8 | **Openness to Cultural Differences**<br><br>Weight 5% | Ask complex questions about other cultures when considering an idea or solution. | Seek out answers to questions about other cultures when considering an idea or solution and suspends judgment in valuing their interactions with cultures that are different to their own. | Initiate and develop interactions with people from cultures different from than their own in order to inform an idea or solution. Suspend judgement in their interactions with cultures that are different to their own. | Argue and defend how concepts, perspectives, and people from cultures that are different from their own can enhance ideas and solutions. Suspend judgement in their interactions with cultures that are different to their own. |

**Team Project (TP) Presentation Rubric Details**

| 100% | Research Paper - Levels of Achievement | | | |
|---|---|---|---|---|
| **Criteria** | **Below Standard** | **Approaching Standard** | **At Standard** | **Exceeds Standard** |
| **Graduate Percentage Scale** | **0%-74.99%** | **75.00%-84.99%** | **85.00%-91.99%** | **92%-100%** |
| **Structure**<br><br>**Weight 20%** | Does not utilize template format. | Sometimes adheres to template, falls short or exceeds page count. | Frequently adheres to template. Follows page count. | Displays mastery of template qualities, able to fit formulated ideas and diagrams into template**.** |
| **Visual Presentation**<br><br>**Weight 30%** | High text content, no visual pictures, spelling errors, relies on slide for presentation. | Reading slides, little visual content, spelling errors diagrams, pictures, engaging material | Slides contain written info without errors, some visual content, elaborated upon by presenter. | Visually appealing, minimal words all spelled correctly, innovative designs, animation. |

| | | | | |
|---|---|---|---|---|
| **Verbal Quality & Engagement**<br><br>**Weight 30%** | Monotone, reads from slides, goes significantly over or under presentation time. No eye contact. | Wordy, mumbles, relies on slides to prompt presentation. Minimal eye contact. | Relies on slides, explain wording on slides to present. Good tonal modulation. Good eye contact. | Uses slides to give visual cues to presentation. Well prepared, cohesive verbiage. Engaging presenter uses eye contact and voice modulation. |
| **Collaboration**<br><br>**Weight 20%** | Disengaged, misses deadlines, and fails to support team. | Minimally contributes to team effort. Contributes when asked. | Performs tasks as assigned, on time. | Completes all material on or ahead of time. Assists other team members, leads activities, and picks up unfinished tasks. |