

COURSE OVERVIEW

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself from the very smallest particles currently accepted as quarks, which may be truly fundamental—to the vast distances between galaxies. The course combines academic study and the acquisition of practical and investigational skills & is suited to students who have an enquiring mind and want to better understand the nature of the physical world. The DP Physics course includes the essential principles of the subject but also, through selection of an option, allows some flexibility to tailor the course to meet the needs of the students. The course is available at both SL and HL, and therefore accommodates students who wish to study physics as their major subject in higher education and those who do not.

LEARNING OUTCOMES

Through studying Physics students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes these subjects.

- The aims enable students, through the overarching theme of the Nature of science, to:
- 1. appreciate scientific study and creativity within a global context through stimulating and challenging opportunities
- 2. acquire a body of knowledge, methods and techniques that characterize science and technology
- 3. apply and use a body of knowledge, methods and techniques that characterize science and technology
- 4. develop an ability to analyze, evaluate and synthesize scientific information
- 5. develop a critical awareness of the need for, and the value of, effective collaboration and communication during scientific activities
- 6. develop experimental and investigative scientific skills including the use of current technologies
- 7. develop and apply 21st century communication skills in the study of science
- 8. become critically aware, as global citizens, of the ethical implications of using science and technology
- 9. develop an appreciation of the possibilities and limitations of science and technology
- 10. develop an understanding of the relationships between scientific disciplines and their influence on other areas of knowledge.

UNIT OVERVIEWS

Unit 1 – Measurements and uncertainties **Approximate Length**: 5 Hours

Unit description: This unit focuses on measurements and certainty: Although scientists are perceived as working towards finding "exact" answers, the unavoidable uncertainty in any measurement always exists. Scientists aim towards designing experiments that can give a "true value" from their measurements, but due to the limited precision in measuring devices, they often quote their results with some form of uncertainty. Some quantities have direction and magnitude, others have magnitude only, and this understanding is the key to correct manipulation of quantities. This sub- topic will have broad applications across multiple fields within physics and other sciences.

Key concepts: Since 1948, the Système International d'Unités (SI) has been used as the preferred language of science and technology across the globe and reflects current best measurement practice.

Learning outcomes:

- Measurements in physics
- Uncertainties and errors
- Vectors and scalars

Unit 2 – Mechanics Approximate Length: 22 Hours

Unit description: Motion may be described and analyzed by the use of graphs and equations. Classical physics requires a force to change a state of motion, as suggested by Newton in his laws of motion. The fundamental concept of energy lays the basis upon which much of science is built. Conservation of momentum is an example of a law that is never violated.

Key concepts: The ideas of motion are fundamental to many areas of physics, providing a link to the consideration of forces and their implication. The kinematic equations for uniform acceleration were developed through careful observations of the natural world. Isaac Newton provided the basis for much of our understanding of forces and motion by formalizing the previous work of scientists through the application of mathematics by inventing calculus to assist with this. Many phenomena can be fundamentally understood through application of the theory of conservation of energy. Over time, scientists have utilized this theory both to explain natural phenomena and, more importantly, to predict the outcome of previously unknown interactions. The concept of energy has evolved as a result of recognition of the relationship between mass and energy. The concept of momentum and the principle of momentum conservation can be used to analyze and predict the outcome of a wide range of physical interactions, from macroscopic motion to microscopic collisions. **Learning outcomes:**

- Motion
 - Forces
 - Work, energy and power
 - Impulse and momentum

Unit 3 – Thermal physics Approximate Length: 11 Hours

Unit Description: Thermal physics deftly demonstrates the links between the macroscopic measurements essential to many scientific models with the microscopic properties that underlie these models. The properties of ideal gases allow scientists to make predictions of the behaviour of real gases.

Key concepts: Scientists from the 17th and 18th centuries were working without the knowledge of atomic structure and sometimes developed theories that were later found to be incorrect, such as phlogiston and perpetual motion capabilities. Our current understanding relies on statistical mechanics providing a basis for our use and understanding of energy transfer in science. Scientists in the 19th century made valuable progress on the modern theories that form the basis of thermodynamics, making important links with other sciences, especially chemistry. The scientific method was in evidence with contrasting but complementary statements of some laws derived by different scientists. Empirical and theoretical thinking both have their place in science and this is evident in the comparison between the unattainable ideal gas and real gases.

Learning outcomes:

- Thermal concepts
- Modelling a gas

Unit 4 – Waves (plus Unit 9 HL only) Approximate Length: 15 Hours + 17 Hours HL

Unit Description: A study of oscillations underpins many areas of physics with simple harmonic motion (shm), a fundamental oscillation that appears in various natural phenomena. There are many forms of waves available to be studied. A common characteristic of all travelling waves is that they carry energy, but generally the medium through which they travel will not be permanently disturbed. All waves can be described by the same sets of mathematical ideas. Detailed knowledge of one area leads to the possibility of prediction in another. Waves interact with media and each other in a number of ways that can be unexpected and useful. When travelling waves meet they can superpose to form standing waves in which energy may not be transferred. The solution of the harmonic oscillator can be framed around the variation of kinetic and potential energy in the system. Single-slit diffraction occurs when a wave is incident upon a slit of approximately the same size as the wavelength. Interference patterns from multiple slits and thin films produce accurately repeatable patterns.

Key concepts: Oscillations play a great part in our lives, from the tides to the motion of the swinging pendulum that once governed our perception of time. General principles govern this area of physics, from water waves in the deep ocean or the oscillations of a car suspension system. This introduction to the topic reminds us that not all oscillations are isochronous. However, the simple harmonic oscillator is of great importance to physicists because all periodic oscillations can be described through the mathematics of simple harmonic motion. Patterns, trends and discrepancies: Scientists have discovered common features of wave motion through careful observations of the natural world, looking for patterns, trends and discrepancies and asking further questions based on these findings. It is speculated that polarization had been utilized by the Vikings through their use of Iceland Spar over 1300 years ago for navigation (prior to the introduction of the magnetic compass). Scientists across Europe in the 17th–19th centuries continued to contribute to wave theory by building on the theories and models proposed as our understanding developed. The conflicting work of Huygens and Newton on their theories of light and the related debate between Fresnel, Arago and Poisson are demonstrations of two theories that were valid yet flawed and incomplete. This is an historical example of the progress of science that led to the acceptance of the duality of the nature of light. From the time of Pythagoras onwards the connections between the formation of standing waves on strings and in

pipes have been modelled mathematically and linked to the observations of the oscillating systems. In the case of sound in air and light, the system can be visualized in order to recognize the underlying processes occurring in the standing waves.

Learning outcomes:

- Oscillations
- Travelling waves
- Wave characteristics
- Wave behaviour
- Standing waves
- Simple harmonic motion
- Single-slit diffraction
- Interference
- Resolution
- Doppler effect

Unit 5 – Electricity and magnetism (plus Unit 11 HL only) **Approximate Length:** 15 Hours + 16 Hours HL

Unit Description: When charges move an electric current is created. One of the earliest uses for electricity was to produce light and heat. This technology continues to have a major impact on the lives of people around the world. Electric cells allow us to store energy in a chemical form. The effect scientists call magnetism arises when one charge moves in the vicinity of another moving charge.

Key concepts: Electrical theory demonstrates the scientific thought involved in the development of a microscopic model (behaviour of charge carriers) from macroscopic observation. The historical development and refinement of these scientific ideas when the microscopic properties were unknown and unobservable is testament to the deep thinking shown by the scientists of the time. Scientists need to balance the research into electric cells that can store energy with greater energy density to provide longer device lifetimes with the long-term risks associated with the disposal of the chemicals involved when batteries are discarded. Magnetic field lines provide a powerful visualization of a magnetic field. Historically, the field lines helped scientists and engineers to understand a link that begins with the influence of one moving charge on another and leads onto relativity.

Learning outcomes:

- Electric fields
- Heating effect of an electric current
- Electric cells
- Magnetic effect of an electric current
- Electromagnetic induction
- Power generation and transmission
- Capacitance

Unit 6 – Circular motion (plus Unit 10 HL only) Approximate Length: 5 Hours + 11 Hours HL

Unit Description: A force applied perpendicular to its displacement can result in circular motion. Electric charges and masses each influence the space around them and that influence can be represented through the concept of fields. Similar approaches can be taken in analysing electrical and gravitational potential problems.

Key concepts: Observable universe: Observations and subsequent deductions led to the realization that the force must act radially inwards in all cases of circular motion. The ability to apply field theory to the unobservable (charges) and the massively scaled (motion of satellites) required scientists to develop new ways to investigate, analyze and report findings to a general public used to scientific discoveries based on tangible and discernible evidence. **Learning outcomes:**

- Circular motion
- Newton's law of gravitation
- Describing fields
- Fields at work

Unit 7 – Atomic, Nuclear and Particle Physics (plus Unit 12 HL only) **Approximate Length:** 14 Hours + 16 Hours HL

Unit Description: In the microscopic world energy is discrete. Energy can be released in nuclear decays and reactions as a result of the relationship between mass and energy. It is believed that all the matter around us is made up of fundamental particles called quarks and leptons. It is known that matter has a hierarchical structure with quarks making up nucleons, nucleons making up nuclei, nuclei and electrons making up atoms and atoms making up molecules. In this hierarchical structure, the smallest scale is seen for quarks and leptons (10⁻¹⁸ m).

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Key concepts: It is believed that all the matter around us is made up of fundamental particles called quarks and leptons. It is known that matter has a hierarchical structure with quarks making up nucleons, nucleons making up nuclei, nuclei and electrons making up atoms and atoms making up molecules.

Learning outcomes:

- Discrete energy and radioactivity
- Nuclear reactions
- The structure of matter
- The interaction of matter with radiation
- Nuclear physics

Unit 8 – Energy production **Approximate Length:** 8 Hours

Unit Description: The constant need for new energy sources implies decisions that may have a serious effect on the environment. The finite quantity of fossil fuels and their implication in global warming has led to the development of alternative sources of energy. This continues to be an area of rapidly changing technological innovation.

Key concepts: Since early times mankind understood the vital role of harnessing energy and large-scale production of electricity has impacted all levels of society. Processes where energy is transformed require holistic approaches that involve many areas of knowledge. Research and development of alternative energy sources has lacked support in some countries for economic and political reasons. Scientists, however, have continued to collaborate and share new technologies that can reduce our dependence on non-renewable energy sources.

Learning outcomes:

- Energy sources
- Thermal energy transfer

Additional Option – D Astrophysics **Approximate Length:** 25 Hours HL 15 Hours SL

Unit Description: One of the most difficult problems in astronomy is coming to terms with the vast distances between stars and galaxies and devising accurate methods for measuring them. A simple diagram that plots the luminosity versus the surface temperature of stars reveals unusually detailed patterns that help understand the inner workings of stars. Stars follow well-defined patterns from the moment they are created out of collapsing interstellar gas, to their lives on the main sequence and to their eventual death. The Hot Big Bang model is a theory that describes the origin and expansion of the universe and is supported by extensive experimental evidence. The laws of nuclear physics applied to nuclear fusion processes inside stars determine the production of all elements up to iron. The modern field of cosmology uses advanced experimental and observational techniques to collect data with an unprecedented degree of precision and as a result very surprising and detailed conclusions about the structure of the universe have been reached.

Key concepts: The systematic measurement of distance and brightness of stars and galaxies has led to an understanding of the universe on a scale that is difficult to imagine and comprehend. The simple light spectra of a gas on Earth can be compared to the light spectra of distant stars. This has allowed us to determine the velocity, composition and structure of stars and confirmed hypotheses about the expansion of the universe. Occam's Razor: The Big Bang model was purely speculative until it was confirmed by the discovery of the cosmic microwave background radiation. The model, while correctly describing many aspects of the universe as we observe it today, still cannot explain what happened at time zero. Observation and deduction: Observations of stellar spectra showed the existence of different elements in stars. Deductions from nuclear fusion theory were able to explain this.

Cognitive bias: According to everybody's expectations the rate of expansion of the universe should be slowing down because of gravity. The detailed results from the 1998 (and subsequent) observations of distant supernovae showed that the opposite was in fact true. The accelerated expansion of the universe, whereas experimentally verified, is still an unexplained phenomenon.

Learning outcomes:

- Stellar quantities
- Stellar characteristics and stellar evolution
- Cosmology
- Stellar processes
- Further cosmology

ASSESSMENT

The assessment objectives for physics reflect those parts of the aims that will be formally assessed either internally or externally. These assessments will centre upon the nature of science. It is the intention of these courses that students are able to fulfil the following assessment objectives:

1. Demonstrate knowledge and understanding of:

- a. facts, concepts, and terminology
- b. methodologies and techniques
- c. communicating scientific information.
- 2. Apply:
 - a. facts, concepts, and terminology
 - b. methodologies and techniques
 - c. methods of communicating scientific information.
- 3. Formulate, analyse and evaluate:
 - a. hypotheses, research questions and predictions
 - b. methodologies and techniques
 - c. primary and secondary data
 - d. scientific explanations.

4. Demonstrate the appropriate research, experimental, and personal skills necessary to carry out insightful and ethical investigations.

Students will be evaluated using formative and summative assessments.

Formative assessment is used to inform both teaching and learning. It is concerned with providing accurate and helpful feedback to students and teachers on the kind of learning taking place and the nature of students' strengths and weaknesses in order to help develop students' understanding and capabilities. Formative assessment can also help to improve teaching quality, as it can provide information to monitor progress towards meeting the course aims and objectives. Formative assessments will take many forms with the goal of scaffolding the knowledge, skills and the critical thinking required to successfully complete summative assessments. Summative assessment gives an overview of previous learning and is concerned with measuring student achievement. All summative assessments will be graded on the 1-7 IB scale. All reports will reflect the IB 1-7 grading scale and will be based the best-fit approach to assessment. The Internal Assessment [IA] task will be one major investigation or scientific exploration and will be worth 20% of the overall assessment. There will also be 3 internal examinations in June of DP1 and January for DP1 and DP2. Paper 1 will consist of multiple choice questions, Paper 2 structured longer answer questions and Paper 3 will be the Options and data analysis examination.

Grade Boundaries for each summative will be published to students by the teacher after the summative assessments are grade

Paper 1

Assessment Description:

This paper is made up of objective questions (multiple choice) and there is no calculator allowed, however a data booklet is allowed. It has a weighting of 20% of the final IB grade.

Duration: Paper 1 consists of 30 multiple choice questions and is 45 mins for SL and consists of 40 multiple choice questions for HL and is 1 hour long.

Paper 2

Assessment Description:

This paper is made up of structured questions and there is a calculator and data booklet allowed. It has a weighting of 36%(HL) or 40% (SL) of the final IB grade.

Duration: Paper 2 is 1 hour and 15 mins for SL and consists of 50 marks and for HL and is 2 hour and 15 mins long and consists of 95 marks.

Paper 3

Assessment Description:

This paper is made up of structured questions based on the Astrophysics Option and data analysis questions. There is a calculator and data booklet allowed.

It has a weighting of 20% (SL) or 24% (HL) of the final IB grade.

Duration: Paper 3 is 1 hour for SL and consists of 35 marks and for HL and is 1 hour and 15 mins long and consists of 45 marks.

Course Requirements

Scientific calculator (no graphing calculators)

Textbooks are available from the TRC. All students should have a Cambridge textbook and also a Pearsons SL or HL textbook for reference. Oxford revision books will be provided which the students may keep and therefore write on/highlight, etc. Kognity the online textbook and questioning tool will be used extensively throughout the course.

Physics Data Booklet Lab instructions booklet

Syllabus reference and past paper questions booklet to be brought to every lesson

Physics ASA will be offered in Grades 11 & 12 in term 2 and 3

Group 4 Project

There is a compulsory Group 4 project where all students studying science will work together collaboratively. All DP Physics students must participate in this collaborative project as part of the syllabus. Participation at GWA consists of learning the Experimental Sciences from new perspectives in a real-life setting. The theme is 'Theme Park Science' and an **off campus** trip will happen during October of Grade 11. The Group 4 Project is assessed internally by a Digital Story Submission by each group in November.

Course Grade Descriptors

While we will look carefully at the grades students have achieved on the various assessments, ultimately, quarterly grades as well as predicted grades will be based on the following grade descriptors.

Grade 7

Displays comprehensive knowledge of factual information in the syllabus and a thorough command of concepts and principles. Selects and applies relevant information, concepts and principles in a wide variety of contexts. Analyses and evaluates quantitative and/or qualitative data thoroughly. Constructs detailed explanations of complex phenomena and makes appropriate predictions. Solves most quantitative and/or qualitative problems proficiently. Communicates logically and concisely using appropriate terminology and conventions. Shows insight or originality.

Demonstrates personal skills, perseverance and responsibility in a wide variety of investigative activities in a very consistent manner. Works very well within a team and approaches investigations in an ethical manner, paying full attention to environmental impact. Displays competence in a wide range of investigative techniques, pays considerable attention to safety, and is fully capable of working independently.

Grade 6

Displays very broad knowledge of factual information in the syllabus and a thorough understanding of concepts and principles. Selects and applies relevant information, concepts and principles in most contexts. Analyses and evaluates quantitative and/or qualitative data with a high level of competence. Constructs explanations of complex phenomena and makes appropriate predictions. Solves basic or familiar problems and most new or difficult quantitative and/or qualitative problems. Communicates effectively using appropriate terminology and conventions. Shows occasional insight or originality.

Demonstrates personal skills, perseverance and responsibility in a wide variety of investigative activities in a very consistent manner. Works well within a team and approaches investigations in an ethical manner, paying due attention to environmental impact. Displays competence in a wide range of investigative techniques, pays due attention to safety and is generally capable of working independently

Grade 5

Displays broad knowledge of factual information in the syllabus. Shows sound understanding of most concepts and principles and applies them in some contexts. Analyses and evaluates quantitative and/or qualitative data competently. Constructs explanations of simple phenomena. Solves most basic or familiar problems and some new or difficult quantitative and/or qualitative problems. Communicates clearly with little or no irrelevant material.

Demonstrates personal skills, perseverance and responsibility in a variety of investigative activities in a fairly consistent manner. Generally works well within a team and approaches investigations in an ethical manner, paying attention to environmental impact. Displays competence in a range of investigative techniques, pays attention to safety and is sometimes capable of working independently.

Grade 4

Displays reasonable knowledge of factual information in the syllabus, though possibly with some gaps. Shows adequate comprehension of most basic concepts and principles but with limited ability to apply them. Demonstrates some analysis or evaluation of quantitative or qualitative data. Solves some basic or routine problems but shows limited ability to deal with new or difficult situations. Communicates adequately although responses may lack clarity and include some repetitive or irrelevant material.

Demonstrates personal skills, perseverance and responsibility in a variety of investigative activities, although displays some inconsistency. Works within a team and generally approaches investigations in an ethical manner, with some attention to environmental impact. Displays competence in a range of investigative techniques, pays some attention to safety although requires some close supervision.

STUDENTS RESPONSIBILITIES

Academic Honesty

Protocol For In-School Malpractice

- The following steps will be followed in cases of malpractice:
- . Teachers will advise students of suspicion of misconduct
- 2. A record of the incident will be forwarded to the Diploma Programme Coordinator
- 3. The Diploma Programme Coordinator will discuss the incident with the teacher
- 4. The Diploma Programme Coordinator will interview the student involved
- 5. The Diploma Programme Coordinator will action appropriate disciplinary measures commensurate to the offense making note of the incident in the SIS which will in turn prompt a communication with parents.

Malpractice on Assessments to be Submitted to the IB

According to the Academic Honesty (2009) document, in cases of malpractice on assessments or exam that are intended for submission to the IB, the following protocol has been put in place.

Once a candidate has submitted his or her work to a teacher (or the coordinator) for external or internal assessment together with the coversheet signed (or authenticated electronically) to the effect that it is the final version of the work, neither the work nor the coversheet can be retracted by the candidate. If the candidate is subsequently suspected of plagiarism or collusion, it is no defense to claim that the incorrect version of the work was submitted for assessment.

After a candidate has signed and dated the coversheet (or authenticated electronically) to the effect that his or her work is authentic and constitutes the final version of that work, the candidate's teacher (or supervisor in the case of an extended essay) must also sign and date the coversheet to the effect that to the best of his or her knowledge it is the authentic work of the candidate. Any suspicion of malpractice that arises after the candidate has signed the coversheet must be reported to the coordinator help desk at IB Cardiff for investigation. However, if there is no tangible evidence of malpractice (such as the source of plagiarism) the candidate must be given the benefit of any doubt and the coversheet must be signed by the teacher/supervisor. It is not acceptable for the teacher to:

- delete the declaration and then sign the coversheet
- submit the work for assessment without his or her signature
- sign the declaration and then write comments on the work or coversheet that raise doubts about the work's authenticity.
- In the above circumstances the IB will not accept the work for assessment (or moderation) unless confirmation is received from the school that the candidate's work is authentic.

If a teacher is unwilling to sign a coversheet owing to a suspicion of malpractice, the matter must be resolved within the school. The coordinator has the option of informing the coordinator help desk that the work will not be submitted on behalf of the candidate (resulting in no grade being awarded for the subject or diploma requirement).

Malpractice in Testing Situations:

Students may not:

- take unauthorized material into an examination room (see below)
- leave and/or access unauthorized material in a bathroom/restroom that may be visited during a test
- pass on information to another student about the content of an examination, this includes facilitating the exchange information between other students in any way
- steal examination papers
- using an unauthorized calculator during an examination

Students must not have unauthorized material (for example, own rough paper, notes, a mobile/cell phone or an electronic device other than a permitted calculator) in their possession during a testing situation. "In their possession" may be taken to mean on the person of the student, in the student's immediate proximity (such as on the floor or desk) or placed somewhere (such as a bathroom/restroom) for access during the test. It is very important to note that guilt will be confirmed by the school administration regardless of whether this material is used, was or was not intended for use or contains information relevant or potentially relevant to the test. The actual possession of unauthorized material constitutes malpractice; the school administration is not required to establish whether the student used or intended to use the material. No leniency is shown to a candidate who claims that they were unaware the material was in their possession.

Late Assessment Policy

Late Assessments:

Should a student not complete a summative assessment on time (this includes summative drafts) teachers will:

• Speak with the student to find out why the assessment has not been submitted.

• An email home will be sent to parents detailing the missed assessment and the student will be asked to stay in school until it is completed.

• If the assessment is pending, once received, they log the infraction in the "reward and conduct" tab in iSAMS regarding the tardiness of the assessment.

• If a student does not attend after school to work on the assessment, the teacher will confer with the student and, if necessary, refer the incident to the Grade Leader. The Grade Leader will discuss the situation with the student to see if support is required or consequences need to be imposed. The Grade Leader will subsequently record the incident in iSAMS. Further incidents of truancy will be escalated to the Secondary School Administration.

• If there is a second incident of a late submission of an assessment, the teacher will report it in an email to the Grade Leader who may contact parents for a meeting where you may be included. The Grade Leader will record their actions in iSAMS.

• Further incidents of late assessments will be reported to Grade Leaders who will forward the incident(s) to the Secondary School administration who, if warranted, will initiate an in-school suspension where students will complete the assessment until it is completed to standard. A record of the suspension will be recorded in iSAMS and prompt a communication with parents.

• Any subsequent incidents of late assessments will necessitate a parent meeting with a member of the Secondary School Administration to determine the best way forward.

Tests Absenteeism

In cases where students are not in school on a test day, a communication from parents will be required.

• The student will need to present their teacher with a doctor's note upon their return to class if the test is to be administred with no consequence.

• Should an authorized absence not be received, the student may not be permitted to write the test and an "NA" representing an "incomplete" will appear on the next quarterly report.

If this incident reoccurs, the issue will be escalated to the Head of Senior School and will receive a '0'.

• Aside from school activities, all test absences will be recorded in iSAMS by the teacher with a note in the "record description" whether the test absence was authorized or not. The Grade Level Leader may follow-up with the student, if necessary.

Teacher Assessment Commitments

All teachers will:

Provide feedback on all formative assessments within one calendar week of receipt.

• Post on Managebac any formative assessment (including homework) no later than 5:00PM the day it is assigned. If the

formative assessment is not posted by this time there is no expectation that the assessment will be completed for the next day.
Discuss with students prior to posting summative assessments and provide at least one calendar week lead time for students

to prepare. Summative assessments will be posted on Managebac at least one week in advance of the due date.

• Work collaboratively with their teacher colleagues and coordinator to work toward the goal of students having no more than 2 summative assessments on a given day.

- Return summative assessments to students with feedback no later than three calendar weeks after the due date.
- Update Managebac immediately upon completion of marking/feedback.

• Communicate, in a timely fashion, with colleagues and administration about students who are turning in late formative and summative tasks in order to implement late assessment procedures, as outlined in the Assessment Policy. Late assessment procedures are outlined below.

• Communicate with parents when assignments/assessments are not turned in on the due date and clearly articulate the next steps for the student.