

BAA Foundations of Inquiry 11

District Name: Coquitlam and Delta

District Number: 43 and 37

Developed by: Stephen Whiffin – Principal – Coquitlam Open Learning (#43)
Dave Truss – Vice Principal –
Neil Stephenson – Principal – Inquiry and Innovations (#37)
Aaron Akune – Vice Principal – Delta Secondary School (#37)
Elsbeth Anjos – Staff Development Coordinator – Innovations and Inquiry (#43)
Jill Reid – Staff Development Coordinator – Secondary Schools and Graduation Program (#43)
Michelle Ciolfitto – Learning Support Teacher - Secondary Schools (#43)

Date Developed: April 4, 2012

School Name: Inquiry Hub (iHub) , Delta Secondary School

Principal's Name: Stephen Whiffin, Terry Ainge

Board/Authority Approval Date:

Board/Authority Signature:

Course Name: Foundations of Inquiry

Grade Level of Course: 11

Number of Course Credits: 4

Number of Hours of Instruction: 100

Prerequisite(s): none

Special Training, Facilities or Equipment Required:

Course Synopsis:

Foundations of Inquiry 11 is a process-based course reflecting the necessary skills for effective participation in contemporary society. Learners will participate in inquiries that are designed to be a complex combination of structured learning with intentional opportunities for students to create, design, imagine along with developing new possibilities.

Students will cycle through the stages of inquiry in an overt, intentional and planful manner across the curriculum, at the appropriate times for the appropriate purpose.

The course structure is intended to reflect a gradual release of responsibility model

Rationale:

Inquiry is necessary for successful participation in our social democratic society. The current and emerging skills required of our contemporary knowledge society require that what learners are able to do is more important than what they know. The natural learning process is invoked through curiosity, which leads to questioning, exploration and the pursuit of these questions in order to satisfy this curiosity. The intent of this course is to identify the knowledge, skills and attitudes reflective of an effective inquiry stance toward learning in order to support students in investigating required or self-selected content.

Inquiry emphasizes the process of learning in order to develop deep understanding in addition to the intended acquisition of content, knowledge and skills. Inquiry draws upon a constructive learning theory where understanding is built through the active development of conceptual mental frameworks by the learner.

Students come to the classroom with preconceptions about the world. Teaching practices must draw out and work with students pre-existing understandings and make student ‘thinking’ visible and central to the learning. At its heart inquiry is a process of metacognition. The purpose of this course is to bring this metacognition to the forefront AS the learning and have students demonstrate their ability to identify the various forms of inquiry – across domains and disciplines and the stages of inquiry as they move through them, experience failure and stuckness at each level.

Foundations of Inquiry 11 recognizes that competence in an area of study requires factual knowledge organized around conceptual frameworks to facilitate knowledge retrieval and application. Classroom activities are designed to develop understanding through in-depth study both within and outside the required curriculum.

Organizational Structure:

Unit/Topic	Title	Time
Unit 1	Principles of Inquiry	students
Unit 2	Question Development	the units of study
Unit 3	Inquiry Design	in a self-paced
Unit 4	Inquiry Facilitation	manner
Total Hours		100-120

Unit/Topic/Module Descriptions:

Principles of Inquiry

Unit 1: In this unit students are required to demonstrate their understanding of the foundational elements of inquiry and the non-linear and organic nature of individual inquiry, including project-based learning and problem-based learning.

Students will be able to...

- Identify and use the terminology of inquiry
- Compare and evaluate a variety of research methodologies for purpose and accuracy
- Identify the elements foundational to all inquiry:
 - Analyzing and evaluating topics and options for their generative capacity
 - Developing questions and evaluate these questions

- Investigating and gathering data through various methods – print and digital research, connecting with experts, personal study, experimentation etc.
- Organizing and theming gathered data/evidence/information
- Synthesizing and constructing learning from inquiry
- Expressing findings by curating (careful selection of artifacts and information for the “narrative” or story)
- Reflecting on learning for next steps, and further question identification

Question Development

Unit 2: Good questions are a foundation to any inquiry. Breadth & depth, compelling, ‘rich’, critical, rigor – answers require construction of knowledge, learning products. “What is the one question students need to know in order to really understand a particular topic?” Galileo framework

Students will be able to...

- Develop a compelling question that is, generative, interesting (to self and others) and is challenging to answer. (Authentic) (This is the overarching question)
- Develop a subset of questions that both hone in on and broaden the overarching inquiry.
- Critically and sceptically analyse questions, and examine:
 - Evidence (how do we know what we know?)
 - Pattern and connection (what causes what?)
 - Supposition (how might things have been different?)
 - Why it matters (who cares?)

Inquiry Design

Unit 3: Designing and executing a personal and/or collaborative inquiry plan from inception.

Students will be able to...

- Analyze and evaluate topics and options for their generative capacity
- Develop questions and evaluate these questions
- Investigate and gather data through various methods – print and digital research, connecting with experts, personal study, experimentation etc.
- Organize and theme gathered data/evidence/information
- Synthesize and construct learning from inquiry
- Express findings by curating (careful selection of artifacts and information for the “narrative” or story)
- Reflect on learning for next steps, and further question identification

Inquiry Facilitation

Unit 4: Inquiry Facilitation

Overview: In this unit students will learn to collaborate to support and provide effective feedback to the inquiry process of others.

Students will be able to ...

- Separate feedback about their work from personal criticism
- Identify points throughout the inquiry process when support is required and who or what resource will best meet the need
- Contribute to the inquiry process of others
- Identify and articulate aspects of the inquiry process that are effective
- Identify and articulate aspects of the work that require more detail, are confusing/vague/unsupported
- Prioritize components that require further attention
- Collaborate to develop a plan of action for moving the inquiry forward

Instructional Components:

All instruction will be conducted in the context of inquiry investigation, analysis, application and reflection.

- Inquiry stance as primary process for instructional engagement with a variety of content – student selected, teacher identified and/or mandated by curriculum
 - On-going nature of the inquiry cycle as initial questions lead to greater questions which lead to the need for on-going reflection and revision - synthesizing, analysing, evaluating etc.
- A variety of individual, partner, small and whole community learning experiences – both face to face and digitally as appropriate to task – principles of effective group work always being utilized
- Structured dialogue and discourse- synchronously and asynchronously, face to face and digitally
- Interdisciplinary study
- Student self-directed, educator supported and facilitated learning plans

Use of experts from around the world via virtual connectedness

Assessment Component:

- Effective formative assessment via:
 - Clearly articulated and understood learning intentions and success criteria
 - Questions posed by students, peers and teachers to move learning forward
 - Discussions and dialogue
 - Feedback that is timely, clear and involves a plan
 - Students as resources for themselves and others – peer and self-assessment
 - Student ownership

Formative assessment used to adapt learning experiences and inquiry plans on an on-going basis to meet specific learning goals.

Development, awareness and action, based upon metacognition intended to lead to learner independence and self-coaching.

Summative Assessment:

Summative assessments will be determined as students demonstrate proficiency/mastery toward particular learning outcomes. Summative assessments and final grades will reflect the following:

- Students will work collaboratively with the teacher to determine summative achievement on assignments and letter grades based upon dialogue, and evidence of learning
- Behaviour and work habits will NOT be included when determining letter grades
- Marks will not be deducted for late work
- Extra credit and bonus marks will not be awarded
- Plagiarizing will not result in reduced marks/grades –the student will be required to demonstrate their learning authentically
- Attendance will not be considered toward letter grade
- Only individual learning demonstrated –no group marks – will be used to determine grades
- Letter grades will reflect learning towards the learning outcomes articulated above
- Letter grades will be based upon criteria provided/agreed upon toward the learning outcomes
- Letter grades will be determined in relation to the learning outcomes – not in comparison to the achievement of other students
- Poor work will not be assessed towards grades – students will only be assessed on quality work
- Professional judgement and evidence will be used to determine final letter grade in consultation with the student
- Zeros will not be assigned to missed assignments – all required assignments must be completed
- Formative or practice towards learning outcomes will not be included in final grade assessment
- Most recent evidence toward learning outcomes will be used to assign letter grades – learning is not averaged over time

Learning Resources:

- Personal learning device
- Stable wireless
- Broadcasting devices – such as LCD
- Learning Management System(LMS)
- Digital Portfolio tool
- Online digital tools – a variety
- Furniture to support a flexible learning environment conducive to the inquiry philosophy
 - Couches
 - Tables/chairs
 - Work stations