ACADEMIC RESEARCH

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<tr>
<th>Board Approval Date: March, 2019</th>
<th>Course Length: 2 Semesters</th>
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<tbody>
<tr>
<td>Grading: A-F</td>
<td>Credits: 5 Credits per Semester</td>
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<tr>
<td>Proposed Grade Level(s): 11, 12</td>
<td>Subject Area: Elective</td>
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<td>Elective Area (if applicable): IB</td>
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<tr>
<td>Prerequisite(s): None</td>
<td>Corequisite(s): Must be enrolled in an IBDP course concurrently</td>
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<tr>
<td>CTE Sector/Pathway: N/A</td>
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<td>Intent to Pursue ‘A-G’ College Prep Status: Yes</td>
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<td>A-G Course Identifier: (g) College-preparatory elective</td>
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<td>Graduation Requirement: No</td>
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<td>Course Intent: Site Specific</td>
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<td>Program (if applicable): IB</td>
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COURSE DESCRIPTION:
IB Research, allows students to deeply explore an academic topic, problem, issue, or idea of interest. Students design, plan, and implement a year-long investigation to address a research question. Through this inquiry, they further the skills they acquire in a International Baccalaureate Diploma Programme (IBDP) course by learning research methodology, employing ethical research practices, and assessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a reflection on planning and process. The course culminates in an academic paper of 4,000 words and a presentation.

An IB Diploma Programme course is a corequisite for IB Research. The required internal assessment components in an IBDP course support the students development of research and writing skills in IB Research. Symbiotically, the inquiry and research skills in IB Research will support student success in any IBDP course.
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<tr>
<th>Unit Number/Title</th>
<th>Unit Essential Questions</th>
<th>Examples of Formative Assessments</th>
<th>Examples of Summative Assessment</th>
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<tr>
<td><strong>1. Developing Research Basics and Research Questions</strong></td>
<td><strong>What is the subject and topic of interest?</strong>&lt;br&gt;<strong>What is the style and scope of scholarly papers and presentations?</strong>&lt;br&gt;<strong>How does one conduct preliminary project research in an area of inquiry using a backwards planning approach?</strong>&lt;br&gt;<strong>What are the characteristics of a Research Question?</strong></td>
<td><em>Preliminary action plan for inquiry project</em>&lt;br&gt;<em>Peer and teacher review of topic and research question</em>&lt;br&gt;<em>Weekly reflection</em></td>
<td><em>Formal presentation of research topic</em>&lt;br&gt;<em>First draft or the research question</em></td>
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<td><strong>2. Finding and Examining Sources</strong></td>
<td><strong>How does one apply analysis methodology to determine category and strength of sources?</strong>&lt;br&gt;<strong>What are the working parts of the body of knowledge relevant to a research question?</strong>&lt;br&gt;<strong>What are the best forms of communication and research for one’s inquiry project?</strong></td>
<td><em>Source collection and categorization applying the effective citing and referencing IB guide</em>&lt;br&gt;<em>Bibliography (focused on research question and methods)</em>&lt;br&gt;<em>Preliminary literature review</em>&lt;br&gt;<em>Weekly reflection</em></td>
<td><em>Oral Presentation “Elevator Pitch”</em>&lt;br&gt;<em>Poster of revised research question</em></td>
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<td><strong>3. Research Design and Methods</strong></td>
<td><strong>What do various research methods entail?</strong>&lt;br&gt;<strong>Which of these methods are most relevant to one’s individual inquiry, and why?</strong>&lt;br&gt;<strong>What are the characteristics of ethical research practices, academic honesty policies, and documentation styles for field-specific research papers?</strong>&lt;br&gt;<strong>How does one develop an action plan for completion of inquiry project?</strong></td>
<td><em>Research methods presentations</em>&lt;br&gt;<em>Bibliography (focused on research methods)</em>&lt;br&gt;<em>Peer review (Gallery Walk) of revised posters</em>&lt;br&gt;<em>Calendar or detailed action plan for inquiry project</em>&lt;br&gt;<em>Weekly reflection</em></td>
<td><em>Detailed outline of essay and bibliography</em></td>
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### 4. Data Analysis and Discussion

What are the multiple perspectives implied by one’s research question? How does one synthesize information from these sources into original work? How does one analyze data gathered through various research methods? How is the argument sustained and supported by evidence? What are the criteria of the IB Rubric, and how does one apply these to the essay?

*Draft Submission(s) for peer review*  
*Revision of Bibliography*  
*Weekly reflection paper completed in proper format (MLA, APA, etc)*  
*Research paper submitted for the IBDP core*

### 5. Preparing Presentations

What are the characteristics of different presentation models? Which models are best suited to one’s paper and audience? How does one demonstrate what has been learned as a result of this inquiry process?

*Presentation to peers for review*  
*Reflection on peer review effectiveness*  
*Oral presentation of research*

### 6. Reflections

How does one adapt written and oral communication to different audiences? What is the evidence of the students learning experience? What is the overall impression of the student’s engagement with the resource process?

*Present inquiry paper to IB students and other peer groups*  
*Discussion/debrief session about IB Research*  
*Completion checklist and final teacher/student progress interview*  
*Complete and submit the Reflections on planning and process form*  
*Complete final weekly reflection*

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**ESSENTIAL STANDARDS:**

This course outlines three learning aims for students (IBO Extended Essay Guide) The aims are for students to:

- engage in independent research with intellectual initiative and rigor,
- develop research, thinking, self-management and communication skills, and
- reflect on what has been learned throughout the research and writing process.
Objectives
In working on the research, students are expected to achieve the following objectives:
Knowledge and understanding
• To demonstrate knowledge and understanding of the topic chosen and the research question posed.
• To demonstrate knowledge and understanding of subject specific terminology and/or concepts.
• To demonstrate knowledge and understanding of relevant and/or appropriate research sources and/or methods used to gather information.

What do I want to know, learn, or understand?

What questions have yet to be asked?
Application and Analysis
• To select and apply research that is relevant and appropriate to the research question.
• To analyze the research effectively and focus on the research question.

What strategies will help me comprehend a text?

How can I connect the multiple arguments?
Synthesis and Evaluation
• To be able to discuss the research in terms of a clear and coherent reasoned argument in relation to the research question.
• To be able to critically evaluate the arguments presented in the essay.
• To be able to reflect on and evaluate the research process.

How can I assess the quality or strength of other’s research products or artistic works?
From whose perspective is this information being presented, and how does this affect my evaluation?
How can I benefit from reflecting on my own work?
A variety of (research) skills
• To be able to present information in an appropriate academic format.
• To understand and demonstrate academic integrity.

How am I able to present information in an appropriate academic format?
Which revision strategies are most appropriate to developing and refining my project at different stages?
How do I act upon feedback I have received?

RELEVANT STANDARDS AND FRAMEWORKS, CONTENT/PROGRAM SPECIFIC STANDARDS:

Link to Common Core Standards (if applicable):
Educational standards describe what students should know and be able to do in each subject in each grade. In California, the State Board of Education decides on the standards for all students, from kindergarten through high school.
CCSS.ELA-Literacy.CCRA.R.1, CCSS.ELA-Literacy.CCRA.R.2, CCSS.ELA-Literacy.CCRA.R.4,
CCSS.ELA-Literacy.CCRA.R.5, CCSS.ELA-Literacy.CCRA.R.6, CCSS.ELA-Literacy.CCRA.W.1,
CCSS.ELA-Literacy.CCRA.W.2, CCSS.ELA-Literacy.CCRA.W.4, CCSS.ELA-Literacy.CCRA.W.5,
CCSS.ELA-Literacy.CCRA.W.7, CCSS.ELA-Literacy.CCRA.W.9, CCSS.ELA-Literacy.CCRA.W.10,
Link to Framework (if applicable):
Curriculum frameworks provide guidance for implementing the content standards adopted by the State Board of Education (SBE). Frameworks are developed by the Instructional Quality Commission, formerly known as the Curriculum Development and Supplemental Materials Commission, which also reviews and recommends textbooks and other instructional materials to be adopted by the SBE.

Link to Subject Area Content Standards (if applicable):
Content standards were designed to encourage the highest achievement of every student, by defining the knowledge, concepts, and skills that students should acquire at each grade level.

Link to Program Content Area Standards (if applicable):
Program Content Area Standards applies to programs such as International Baccalaureate, Advanced Placement, Career and Technical Education, etc.

TEXTBOOKS AND RESOURCE MATERIALS:

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<th>Textbooks</th>
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<tr>
<td><strong>Board Approved</strong></td>
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<tr>
<td>We are currently piloting this material</td>
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Other Resource Materials
International Baccalaureate Effective citing and referencing guide.
Complex and scholarly sources, including peer-reviewed sources from an academic research community.
International Baccalaureate Extended Essay Guide.
Gale Database: Scholarly Resources for Learning and Research.
Supplemental Materials
Board Approved Supplemental Materials (Including but not limited to: Film Clips, Digital Resources, Supplemental texts, DVDs, Programs (Pebble Creek, DBQ, etc.):