Core Education – Scientific Inquiry & Analysis

Course Description (50 to 80 words is ideal)

CIM Help text: The primary purpose of the course description is to clarify course content. Visit Course Descriptions for more information about writing a good course description.

Core Ed Questions

Does this course fulfill a Core Ed category requirement? Yes/No

Date SOI Approved MM/DD/YY

CIM Help text: The Statement of Intent (SOI) is a form submitted through CIM Misc that notifies the Bacc Core Committee of your college's intention to request Core Ed status on certain courses. You can find the SOI approval date by viewing the 'History' column on the right-hand side of the misc proposal.

If this course is part of Common Course Numbering, an additional question will be asked:

Does this course qualify for the exception to be more credits than allowable for the Core Ed category due to CCN regulations? Yes/No

Is this course currently in the existing Bacc Core? Yes/No

*** If your answer is Yes:

Would you like this course to continue in the existing Bacc Core? Yes/No

*** If your answer is Yes:

Provide a rationale for the request for your course to remain in its current Bacc Core category. A good rationale will describe the fundamental continuity between the existing category and the new category.

Open Educational Resources (OER)

For the non-OER/non-freely-available course resources, indicate whether or not an effort was made to find (an) OER/freely-available alternative(s).

Yes

No***

Not Applicable (course uses only OER and freely-available resources)

***If your answer is No, you will have to accept the following OER acknowledgement:

In order to maximize access to quality General Education, OSU strongly encourages all course designers and instructors to use OER in their courses. Where adequate OER are not available, course designers and instructors are encouraged to search for low-cost or no-cost options.

Faculty Training

Provide details on the required trainings completed by the faculty (re)designing this course.

Faculty Name

Training Completed

Date Completed
Scientific Inquiry & Analysis

Category Specific Criteria Questions

Is this course 5-credits? If the lab component is taught in a separate course, and the total of the two courses together is 5-credits, answer yes.

If yes, respond to the following acknowledgement:
   Acknowledge that any major requiring this 5-credit course (including separate lab course, if applicable) can absorb the additional credit. It is the responsibility of the unit administering this course to communicate with any impacted programs about that major requirement.

If no, go to the next question.

How will students complete the lab portion of the requirement?
   The lab is included within this course.
   If this response is checked, then answer the following:

   Describe how the lab uses experiential activities that collectively employ the full spectrum of the scientific process from observation to analysis, interpretation, and communication of results. Such activities shall have students use scientific methodology, tools, and techniques (as appropriate to the field of inquiry), develop and/or use qualitative or quantitative observations from either primary or secondary data, and apply science concepts for inquiry into natural systems or phenomena. Within labs, students should make interpretations, draw conclusions that are rooted in empirical evidence, and communicate their results.

   Does the lab constitute at least 25% of the 4-credit course grade (or at least 20% of the 5-credit course grade)? Yes/No

   The lab is completed in a separate lab course.
   If this response is checked, then answer the following:
   Enter the course number for the Lab Course

Describe how the course explicitly teaches the process of science. The process of science is defined as the iterative and objective manner in which scientists gather data about observable natural phenomena using discipline-appropriate research methods, analyze these data, form hypotheses based on the data, and communicate to and work within a global community of individuals and organizations contributing to science.

Category Specific Learning Outcomes (CSLO) Questions

*** Questions are repeated for each of the learning outcomes.
CSLO #1: Utilize scientific language, concepts, hypotheses, theories, and laws of basic natural sciences.

Each category student learning outcome must be integral to the course. Describe in detail how this course is designed to address this CSLO.

Briefly describe the class activities and assignments that address this CSLO.

Which assignment type will be used as the Essential Assignment for assessment of this CSLO? (select only 1)

- Collection
- Presentation
- Paper
- Project
- Reflection
- Examination
- Performance/Production

Provide a brief description of the Essential Assignment, and how it will measure the learning outcome. Note, if you are using a single Essential Assignment to assess multiple learning outcomes, be sure that the description here is focused on assessment of this CSLO.

CSLO #2: Apply the cyclical process of science and think critically by constructing consistent explanations and drawing conclusions based on empirical evidence and current scientific understanding.

Each category student learning outcome must be integral to the course. Describe in detail how this course is designed to address this CSLO.

Briefly describe the class activities and assignments that address this CSLO.

Which assignment type will be used as the Essential Assignment for assessment of this CSLO? (select only 1)

- Collection
- Presentation
- Paper
- Project
- Reflection
- Examination
- Performance/Production

Provide a brief description of the Essential Assignment, and how it will measure the learning outcome. Note, if you are using a single Essential Assignment to assess multiple learning outcomes, be sure that the description here is focused on assessment of this CSLO.
**CSLO #3: Articulate the consequences and implications of science for society, daily life, and decision-making.**

Each category student learning outcome must be integral to the course. Describe in detail how this course is designed to address this CSLO.

Briefly describe the class activities and assignments that address this CSLO.

Which assignment type will be used as the Essential Assignment for assessment of this CSLO? (select only 1)

- Collection
- Presentation
- Paper
- Project
- Reflection
- Examination
- Performance/Production

Provide a brief description of the Essential Assignment, and how it will measure the learning outcome. Note, if you are using a single Essential Assignment to assess multiple learning outcomes, be sure that the description here is focused on assessment of this CSLO.

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**Syllabus Requirements**

We collect syllabus information in this form for archiving and reporting purposes. You may copy and paste text from your syllabus into these fields. For more information visit Syllabus-Minimum Requirements.

**Student Learning Outcomes**

*CIM Help text: While Core Ed/Bacc Core courses have learning outcomes specific to their category, the student learning outcomes listed in this field should be course-specific and separate from the Core Ed/Bacc Core learning outcomes. Read more about student learning outcomes.*

**Course Content**

List weekly schedule including topics and assignments. If it is not possible to list the weekly schedule, include a concise outline of topics and activities covered in the course.

**How will student performance be evaluated?**

If the proposal includes multiple locations or modalities, and there are differences in the grading breakdown on the different syllabi, then this section must include information from all syllabi.

*CIM Help text: Evaluation of Student Performance’ refers to the grading breakdown of your course. For example, “Participation: 10%; Assessment 1: 25%; Assessment 2: 15%; Quiz 1: 5%; Quiz 2: 5%; Midterm Exam: 20%; Final Exam: 20%” Grading is subject to Academic Regulations 17, 18 and 19.*

**Learning Resources**

*CIM Help text: Textbooks, lab manuals, etc, that may be required or optional.*

**Syllabus – Attach File(s)**
Core Ed/Bacc Core courses must include a syllabus for each location and each modality. Reference the specific syllabus template appropriate to the course, location, and modality. Templates can be found in the Syllabus-Minimum Requirements.

Syllabi must be updated to include the required Core Ed elements as found on the templates. Those elements are:

1. Include the verbatim fulfillment statement regarding the Core Ed/Bacc Core categories.
2. Include the 3 relevant category learning outcomes verbatim in an explicitly identified and labeled list which is located near the course fulfillment statement (see above).
3. Make a direct, clearly stated connection between each listed Core Education category learning outcome and specific attributes of the course content. The level of detail used should make it evident to students how different aspects of the course fulfill the specific category learning outcomes.
4. Include a clear description to students of how the Core Education category learning outcomes will be assessed within the course. Assessments need to be described in enough detail that the connection between assessment method and learning outcome is apparent. (simply stating “exam, quizzes, homework, class discussion” will not provide enough detail)

Supporting Documentation – Only possible by contacting cim.help@oregonstate.edu.

CIM Help text: Most proposals do not need supporting documentation.