## AOSC's Revised Comprehensive Examination: Clarifications and FAQs

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### Clarifications (see additional clarifications - 09/21/23)

- 1. The Comprehensive exam can be taken after the student has successfully taken the six core courses: AOSC 610, 611, 620, 621, 617, and 680, or its AOSC-agreed equivalents at another institution.
- 2. No written examination will be offered after February 2021
  - Eligible students will have a choice to take the written or oral exam in September 2020.
  - Those who select the written exam in September 2020 and do not pass, can opt to take *either* the written or the oral exam in February 2021.
  - *Only* those who do not pass the September 2020 written exam can opt for the February 2021 written exam.
  - Students who select the oral exam in September 2020 and do not pass may only take the oral exam in February 2021.
- 3. The Oral Comprehensive Exam:
  - Students will make a 10-minute presentation to the committee on a selected pre assigned topic.
  - Open exchange with the committee on the topic and a broader discussion of the material from core courses
  - The final comprehensive exam grade will be weighted as follows:
    - $\circ~$  60% of the six core courses based GPA
    - $\circ~$  40% of the committee-average score from the oral exam
      - Automatic pass if the score > 3.2
      - If the score ≤3.2 but ≥2.7, the exam can be retaken but in its immediate next offering.
      - If the score is <2.7, the exam is failed.
  - The oral exam can only be taken twice.
- 4. Students will choose a topic from the topics list provided by the exam committee 4 weeks before the exam week.
- 5. The Oral Exam Committee is made up of 5 AOSC faculty members:
  - Candidate's research/academic advisor
  - Tenure and/or Professional track faculty from three groups: Dynamics, Climate, and Physics-Chemistry
  - No more than two faculty members, including the advisor, shall be from any one group
  - The Oral Exam Committee will be constituted by the AOSC Exam Committee.

- 6. The exam will be offered twice a year—in the Fall and Spring semesters: The target week will be the week following the end of the university's schedule adjustment period in that semester.
- 7. Students are expected to advance to candidacy one year after the successful completion of the oral comprehensive examination.

## NOTE: Due to the evolving Covid-19 situation, the following changes can be made at the discretion of the University and/or Department:

- The written exam may be canceled if the University closes the campus and in-person testing is not allowed. In that case, the exam will be conducted orally and administered remotely for all students.
- If a student selects the written exam but does not feel comfortable coming to campus for in-person testing, the oral exam must be taken.
- If a student does not meet the requirements for the revised oral exam and the written exam is not offered due to campus closure, the oral exam requirements will be waived for the student.

## FAQs

#### 1) Examples of topics?

Some examples include the hydrologic cycle variability, ENSO, droughts, Amazon fires, etc. Similar topics from core courses, including those related to current research.

#### 2) Can current students take the written exam?

The written version will be offered in September 2020 and February 2121. Current students may choose to take the written exam in September 2020.

#### 3) If a student takes the written exam and fails, can he/she choose to take the oral exam later?

Students who fail the September 2020 written exam may opt to take either the written or oral exam in February 2021.

#### 4) Will students be asked to do math problems or just discuss concepts?

This exam is open-ended. In general, students are expected to discuss how they would work through problems; this can include quantitative analysis.

5) Since students cannot use visual aids, is the use of whiteboard allowed for discussing concepts?

The whiteboard use is allowed, but no PowerPoint. Visual aids will not be part of the exam and will not be graded.

#### 6) When will the new comprehensive exams be offered?

Twice a year, in the early part of the Fall and Spring semesters, starting in September 2020.

#### 7) Why isn't the exam offered in the summer?

The exam is not offered in the summer due to faculty unavailability.

**8)** How should a student handle unfair questions from the committee during the exam? A student's advisor will be a part of the exam committee. If a student begins to get questions he/she deems unfair, they should try answering them to the best of their ability. The committee is trying to determine how students think on their feet and how well they have assimilated the content from the core courses.

#### 9) How soon will exam results be available?

The exam committee will be expeditious and announce results soon after all oral exams have concluded.

#### 10) Is there an issue if multiple people take the same topic?

The exams will be closed-door, so we don't expect this to be an issue. It would also be in students' interest to not share their unique insights on topics with each other.

#### 11) Why is only core GPA considered, and not the cumulative one?

Only six AOSC courses are part of the core curriculum. Except for transfer students, every student is expected to take all the six core courses enumerated above.

#### 12) What is the policy for transfer students regarding core courses?

For each course, the student must provide the syllabus for the current AOSC core course as well as the corresponding course taken at the other institution, and include a comparative summary of the two courses. This written petition must be approved, on a case by case basis, by the student's advisor and the AOSC Graduate Director before registration for the oral comprehensive examination.

Please note students who do not have a 3.0 in the core courses are not eligible for exam registration.

Note: Students who do not display a good knowledge of the core courses during the oral examination may be required to take the core course(s) that were initially waived during their petition approval. This decision is at the discretion of the examination committee.

# 13) Does the research advisor and academic advisor (if different) need to be present during the oral examination?

The oral exam committee is made up of AOSC's tenure and professional track faculty. The oral exam committee is selected by the AOSC Exam Committee. A student's advisor – preferably, research advisor – will be on the exam committee. If the research advisor is not from AOSC's tenure or professional track faculty, the student's academic advisor will be on the committee.

#### 14) What if a student is studying data assimilation?

Regardless of the student's research area, all students must complete the six core courses and be ready to discuss one of the pre-assigned topics and demonstrate their ability to use the knowledge acquired from the six core courses in discussing problems in atmospheric and oceanic sciences.

#### 17) When are the topics announced?

Research topics will be announced 4 weeks in advance.

#### 18) Are students permitted to take the exam three times given the recent change in exam

format? Students are only permitted to attempt the exam twice.

### **Clarifications added on 9/21/23**

#### 1. Can I reference notes/note cards during the presentation?

A: No visual aids are all encompassing which includes notes.

#### 2. The questions are long, can I bring my topic question to reference.

A: Yes, you can bring your topic question.

#### 3. Can I use the dry erase board to clarify during the presentation and exam?

A: Yes, you can use the dry erase board to clarify during the presentation and examination.