

Assessment of Core Knowledge, Critical Thinking, and Scientific Methodology



(to be completed by **each committee member** after a student's defense)

Please return to Academic Program Coordinator

This instrument is only used for outcomes assessment. It is not intended to be part of your evaluation of this student's qualifications. It will not become part of the student's records. Your responses will be kept anonymous with respect to the student.

| Evaluator's Name | | | | |
|---------------------------|-------------|------------|----------------------|----------------------|
| Student's Name | | | | |
| Date of Assessment | | | | |
| Degree Program of Student | M.S.(Crops) | M.S.(Soil) | Ph.D. (Crop Science) | Ph.D. (Soil Science) |

DIRECTIONS: Please respond to each of the statements below using a scale of 1 (strongly disagree) to 5 (strongly agree).

| SCORE | | | | | | |
|-------|---|--|--|--|--|--|
| | Α | Student has core knowledge in Plant and/or Soil Sciences | | | | |
| | В | Student has background knowledge in the general area of his/her research project. | | | | |
| | С | Student is familiar with most analytical instruments and methods used in his/her area, including the principles on which they are based. | | | | |
| | D | Student was aware of literature both directly relevant to the work done and from related fields. | | | | |
| | Ε | Student is able to construct hypotheses well. | | | | |
| | F | Thesis/dissertation tested hypotheses generated by the candidate from an analysis of previous work, both published and unpublished. | | | | |
| | G | Experiments reported were designed well to test hypotheses. | | | | |
| | Н | Experiments included all necessary positive and negative controls. | | | | |
| | | Work reported used appropriate field and/or laboratory methods. | | | | |
| | 7 | Work reflects student's competency in use of computational tools. | | | | |
| | K | Results of experiments were interpreted appropriately. | | | | |
| | L | Results were placed in proper context with other work. | | | | |
| | M | Work contributes to the advancement of the field. | | | | |
| | N | Thoughts were logically organized. | | | | |
| | 0 | Thoughts were expressed clearly, using appropriate words, correct grammar, etc. | | | | |
| | Р | Good use was made of tables and figures. | | | | |
| | Ø | Appropriate credit given to ideas, quotations, and illustrations from other sources. | | | | |
| | R | Student understood questions asked of him/her in the defense. | | | | |
| | S | Student answered defense questions and, to the best of my knowledge, correctly. | | | | |

DIRECTIONS: For the following disciplines, please indicate your perceptions of the student's knowledge: (1) inadequate, (2) adequate, (3) excellent. Please leave blank if you cannot judge based on your experience with this student.

| SCORE | Discipline | SCORE | Discipline | SCORE | Discipline |
|-------|-----------------------------|-------|-----------------------|-------|--------------------------|
| | Agricultural Economics | | IPM | | Soil Genesis/ Morphology |
| | Bioinformatics | | Molecular Biology | | Soil Management |
| | Biotechnology | | Plant Biochemistry | | Soil Microbiology |
| | Botany | | Plant Breeding | | Soil Nutrient Management |
| | Crop Ecology | | Plant Pathology | | Soil Physics |
| | Cropping Systems Management | | Plant Physiology | | Statistics |
| | Entomology | | Precision Agriculture | | Weed Science |
| | Genetics | | Soil Chemistry | | |