

Genetics Concept Assessment

As a student enrolled in biology coursework for science majors, you are invited to participate in a study about student learning of genetics concepts in science courses. The purpose of the project is to assess student understanding of genetics concepts as they progress through their science coursework at the University of Wisconsin-Madison.

As a participant in this study you will be asked to complete a multiple choice Genetics Concepts Assessment paper survey. Demographic information (major, gender, etc) will also be collected. The survey should take about 40 minutes to complete. Your participation is voluntary. If you decide not to participate or to withdraw from the study it will have no effect on your grade in this class. Any publications resulting from this study will include group data, not individual data or scores. Your course instructors will not see your individual scores.

23. Do you consent to have your data included in the study?

- 0) yes
- 1) no

24. Are you 18 years of age or older?

- 0) yes
- 1) no

25. What course are you taking this survey in?

- 0) Biology 101
- 1) Biology 151
- 2) Biology 152
- 3) Biocore 301
- 4) Biocore 333
- 5) Genetics 466

26. Gender

- 0) male
- 1) female

27. What is your race/ethnicity? Please choose one.

- 0) Asian
- 1) Black or African American
- 2) Hispanic
- 3) Native American or Alaska Native
- 4) Native Hawaiian or Pacific Islander
- 5) White or Caucasian
- 6) Other

28. How many semesters of undergraduate coursework have you completed?

- 0) None
- 1) One
- 2) Two
- 3) Three
- 4) Four
- 5) Five or greater

29. In high school, did you take Advanced Placement (AP) Biology, International Baccalaureate (IB) Biology, or other similar honors Biology coursework?

- 0) yes
- 1) no

30. Do you have any experience working in a research laboratory (not including undergraduate laboratory courses)? For example: independent research, summer internships, research apprenticeships etc.

- 0) yes
- 1) no

How frequently do you study in each of the following ways in your science courses?

31. Study alone

- 0) Never
- 1) Once a month
- 2) Once a week
- 3) Several times a week

32. Study with a classmate

- 0) Never
- 1) Once a month
- 2) Once a week
- 3) Several times a week

33. Study with an informal study group with classmates

- 0) Never
- 1) Once a month
- 2) Once a week
- 3) Several times a week

34. Study with a formal study group with peer leader/mentor

- 0) Never
- 1) Once a month
- 2) Once a week
- 3) Several times a week

35. How much competition do you feel towards your classmates at this point in the semester?

- 0) No competition
- 1) A little competition relative to my other courses
- 2) Moderate competition relative to my other courses
- 3) A lot of competition relative to my other courses

Please rate the following activities as to the relative value or helpfulness in learning material in your science courses.

36. Reading before lecture

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

37. Reading textbooks

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

38. Doing chapter problems

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

39. Watching and reviewing online movies/podcasts

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

40. Taking and reviewing lecture notes

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

41. Reviewing in-class worksheets or activities

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

42. Rewriting or outlining notes

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

43. Making flashcards

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

44. Making diagrams

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

45. Reviewing and practicing old exams

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

46. Doing and reviewing assigned homework questions or problem sets

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

47. Discussing material with others (TA's/students) in discussion sections

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

48. Studying alone

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

49. Studying with a classmate

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

50. Participating in an informal study group with classmates

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable

51. Participating in a formal study group with a peer leader/mentor

0) Not helpful 1) Helpful 2) Very helpful 3) NA – not applicable