1. Introduction to survey

Confidentiality Notice   Your professor is part of the Socio-Environmental Synthesis (SES) Teaching Study, a research project that is taking place at a number of colleges and universities. As part of this research project, we will be collecting data from you with assignments such as this one.   Your responses will be held in confidence. Only your professor(s) will know your identify. Before sharing any of your responses with the other researchers in the study, your name will be replaced with a unique identifying code. In this way, the data will be completely confidential beyond your professor(s). Your name will not be published in association with any specific comment or information you give.   Please type your initials to indicate that you read and understand the confidentiality conditions of this survey.Thank you.   **Open-Ended Response**

Please indicate if you give your consent to use your data in our research (such as your responses to the questions on this survey). If you choose not to participate, none of your responses will be shared with the other researchers in the project, nor will they be used in the research and any publications or presentations that result.   **Response**

2. Skills and Interest

SES inquiry skills - enjoyment

1. Please rate your agreement or disagreement with each of the following phrases completing the sentence that starts, "I really enjoy ... "
Choices are: strongly disagree, disagree, neutral; neither agree nor disagree, agree, strongly agree

a) Gathering or acquiring information from different fields, like environmental science, economics, anthropology, etc.
b) Coming up with my own answers to complicated questions.
c) Evaluating and criticizing arguments I hear or read using evidence and reasoning.
d) Working with large datasets with lots of numbers and variables.
e) Trying to combine information from different fields, like environmental science and economics into a single story or argument.
f) Approaching a complicated problem by first figuring out what I already know about the subject.

SES inquiry skills - importance

2. For the same skills as in Question 1, please rate your agreement or disagreement with each of the following phrases completing the sentence, "I think ... is really important to be able to do."
Choices are: strongly disagree, disagree, neutral; neither agree nor disagree, agree, strongly agree

a) Gathering or acquiring information from different fields, like environmental science, economics, anthropology, etc.
b) Coming up with my own answers to complicated questions.
c) Evaluating and criticizing arguments I hear or read using evidence and reasoning.
d) Working with large datasets with lots of numbers and variables.
e) Trying to combine information from different fields, like environmental science and economics into a single story or argument.
f) Approaching a complicated problem by first figuring out what I already know about the subject.

Cross disciplinary awareness

3. Please rate your agreement or disagreement with each of the following five phrases completing the sentence that starts, "Most issues involving the socio-environmental problems can be better understood with information from ..."
Choices are: strongly disagree, disagree, neutral, agree, strongly agree

a) environmental science
Please explain your answer, giving specific examples if you agree or strongly agree.
b) economics
Please explain your answer, giving specific examples if you agree or strongly agree.
c) politics, policy studies, decision science
Please explain your answer, giving specific examples if you agree or strongly agree.
d) anthropology and ethnography
Please explain your answer, giving specific examples if you agree or strongly agree.
e) ethics
Please explain your answer, giving specific examples if you agree or strongly agree.

Collaboration

4. Please rate your agreement or disagreement with each phrase, completing the sentence that starts, "I really value ...
Choices are: strongly disagree, disagree, neutral; neither agree nor disagree, agree, strongly agree

a) Working in groups because they are more productive.
b) Working in a group with different majors.
c) Getting other peoples' perspectives.
d) Working with others to fill in gaps in my own knowledge.
e) Working on my own because it is more productive.

Systems thinking

5. Please rate your agreement or disagreement with each statement.
Choices are: strongly disagree, disagree, neutral; neither agree nor disagree, agree, strongly agree

a) I see the importance of approaching a complicated problem by figuring out the system that is behind the problem.
b) I fully understand what it means to understand something as a system.
c) Diagrams and other ways to visualize a complex problem or system help me understand things better.
d) Using multiple ways of visualizing a complex problem or system help to communicate about it to others.

Normative thinking

6. Please rate your agreement or disagreement with each statement. The term "values" as used here includes one's beliefs, ideals, or sense of what "ought" or "should be."
Choices are: strongly disagree, disagree, neutral; neither agree nor disagree, agree, strongly agree

a) It is really important to understand how different people place values on different things.
b) Values don't belong or fit in the science classroom.
c) Science cannot be made useful to society unless values are taken into account.
d) It is impossible to really understand or study values.
e) In most environmental issues, there is only one correct ethical stance or solution.
f) Many sets of values can be involved in a socio-environmental issue.
g) We can think rigorously about values in order to better understand them.
g) It is important to be able to distinguish claims based on values from claims based on evidence/ facts.

3. Attitudes about science, scholarship and society

Understanding of scholarship & Society

1. Please indicate the degree to which you agree or disagree with each proposition.
Choices are: strongly disagree, disagree, neither agree nor disagree, agree, strongly agree

a) Good scholars are totally objective.
b) Scholarly research is a quest for absolute truth.
c) Coming up with hypotheses in any field requires creative thinking.
d) For scientific questions in which there is controversy and no clear right answer, all opinions are equally valid.
e) Scientists and other scholars have a responsibility to communicate their findings to policy makers and the public.
f) Scientists and other scholars should change the way they do research so that the results are more useful to society.
g) Research is a social process and is deeply influenced by the dominant social forces that act on scholars.
h) Scientists and other scholars create knowledge but it is up to others to act on that knowledge.

Liking different domains.

2. Please indicate the degree to which you agree or disagree...
Choices are: strongly disagree, disagree, neutral; neither agree nor disagree, agree, strongly agree

I like environmental science
I like economics, sociology, politics, policy science, etc.
I like anthropology, culture studies, ethnography, etc.
I like ethics and philosophy
Please, briefly explain your response to the above question (what is it about each that appeals or does not appeal to you?)

4. Module Assessment

Usefulness of Activities

1. Please rate the usefulness of each part of the SES Module you participated in.
Choices are: 0 - not applicable/didn't do, 1- not at all useful, 2- only a little useful, 3- somewhat useful, 4- moderately useful, 5- extremely useful

Taking a case study approach with a challenging focal question/issue, in general
The particular focal question and issue we addressed
The What do you Need to Know and Systems diagramming activity
The jigsaw approach to the case study, in general
The specific expert or perspective group you particiipated in
The specific mixed group you participated in
The synthesis, actionable science assignment and product
Getting to work with data and evidence from different disciplines.
Feedback and input you got from other studentws
Feedback and input you got from your professor(s)
Input you got from your readings and the internet
Input you got from field trips
Input you got from outside experts or stakeholders

Comments on module

2. Please explain what aspects of the Module were most interesting to you and why. Open-ended Response
3. What advice would you give to your professors for improving the module and how they taught it in the future?
4. What advice would you give to fellow students who migtht be participating in this module in the future?
5. In your own words, briefly describe the problem that the SES module(s) addressed.
6. What data and other types of evidence did you use, how did you obtain them, and how did you use them to address the problem or focal question?
7.What challenges did you face in working with or understanding the different types of data and evidence in the module(s)?
8. Did the SES module(s) affect the way you think about human interactions with the environment? Please explain.
9. Did you empathize with any of the different stakeholders or types of experts involved in the problem? Please explain.
10. What actions do you now see that could be done by one or more of the different stakeholder groups you explored, and what values do you think would be motivating their actions?
11. What actions do you now see that could be done by one or more of the different stakeholder groups you explored, and what values do you think would be motivating their actions?
12. What would you say was your greatest accomplishment in doing synthesis as part of the SES module(s)?

5. Future impacts

In the future, I plan on using the conceptual ideas and approaches I developed in the SES module(s).
Please explain your response.
The project and small group work gave me more confidence in attacking complex problems.
Please explain your response.

6. Student Information

Name or Identifying Code: Open-Ended Response
Please mark the university you are enrolled at.   Response
Please indicate your year in college.   Response
    If other, please explain
What is your major at this time?   Open-Ended Response
How confident are you that...   this will be your major when you graduate?
Presently enrolled in which course?   Open-Ended Response
One last question...   ...about how long did it take for you to complete this survey?