

COURSE SYLLABUS

EVPP 337-004

Environmental Policy Making in Developing Countries

Spring 2020

Class period: January 22 to May 16, 2020

Location: Nguyen Engineering Building 1107

Meeting time: Monday, from 7:20 pm to 10:00 pm

Instructor: Dr. Paul Philippe Razafinjatovo

Email address: prazafin@masonlive.gmu.edu (preferred way of contact)

Office Hours: Monday from 05:00 pm to 06:00 pm

Office: David King Hall Room 3026

1- Course Description:

Environmental Policy making in Africa goes hand in hand with the efforts to promote Sustainable Development. All initiatives to address environmental issues should integrate the challenges relative to social, economic and political dimensions. This course studies the essentials of sustainable development initiatives, explores key environmental issues such as climate change and biodiversity loss, and analyzes the processes through which policies were developed to address them in Africa. While the development of environmental policies adopts well-established procedures, their design is shaped by various conditions. This class also studies the conditions under which environmental policies are developed in Africa.

This course is divided into three parts. The first part provides an overview of Environmental Policy Development mechanisms and their application in the context of Africa. The second part introduces the concept of sustainable development as a key component of environmental policy development in Africa. The third part focuses on important environmental issues such as climate change and biodiversity loss that affect African countries, the relevant mechanisms, and players involved in the development of policy that addresses such issues.

2- Learning objectives:

The main objective of this course is to provide students with essential knowledge of the environmental policy development mechanism in developing countries. Upon completion of this course, the students receive clear understanding of how and why environmental policy is

developed in developing countries with focus on Africa and what challenges are involved in this process. It is therefore important to understand some of the characteristics of developing countries that could cause these challenges. In doing so, students will study the different factors that influence the development and implementation of environmental policies in developing countries. In addition, students will receive clear understanding of some important environmental issues and the different ways they are addressed at the national and international levels. Finally, they will receive strong oral and written communication skills that are necessary for their future studies and career.

3- Course instructional method

This course is mainly delivered through lectures, but class discussions are also organized to provide students with a learning environment that strengthens their critical skills and knowledge of the subjects studied in this course.

The lectures are intended to provide students with key knowledge and understanding of the subjects taught in this course. They also help them understand various concepts that are highlighted in the reading materials.

Class discussions are mainly intended to discuss the reading materials in order to highlight some key points relevant to the subjects covered in this class. In addition, they help to clear up potential misunderstandings, encourage critical thinking, and draw some lessons that are applicable to the development of environmental policies.

Students are expected to read the assigned reading materials before attending class in order to be ready for class discussions or an eventual quiz. Some questions on the reading materials may be provided beforehand to guide students identify the main ideas and key aspects.

Upon completion of a reading assignment, students are required to complete an open-book quiz to demonstrate their knowledge and understanding of some important points highlighted in the reading materials. The open book quiz is also expected to test the critical thinking skill of the students on the materials. Students receive feedbacks on their answers to guide their understanding of the materials and the subjects taught in this course. In addition, closed book quizzes on reading materials and lecture slides encompassing three to four subjects are also given to students to test their knowledge and understanding.

Class participation is essential to learning in this class. Students are expected to participate in class. Their participation is assessed during lectures and class discussions. Class participation grade depends on attendance and the quality and quantity of the students' participation. Students can demonstrate their critical thinking by giving relevant comments, answering and asking questions to share their knowledge or to show their interests in the lecture.

The written and oral assignments are expected to strengthen the student's knowledge and understanding of environmental policy making in Africa and to express it in a professional way either through an oral presentation or in writing. The order in which the subjects are taught in this class is set in a way that provides the students with the knowledge of the mechanisms and challenges involved in environmental policy making before studying their application to different environmental issues in Africa.

4- Writing Intensive Course

This course fulfills the “Writing Intensive Course” requirement. Therefore, the lecturer devotes class time to providing instructions to students on how to complete written assignments successfully. To do this, students should complete a minimum of 3,500 words written assignments. In addition, the instructor should provide constructive feedback on drafts. For more information about the University’s writing-intensive requirement, please visit http://wac.gmu.edu/program/wi_requirement

5- Course prerequisite:

Students who have completed 60 credits are accepted in this course. Please inform your instructor if you do not meet this requirement.

6- Tardiness and absenteeism:

Students are required to attend every lecture and arrive on time. If you are late for more than thirty minutes you are welcome to enter the classroom but you are considered absent. Please email to me in advance if you cannot attend the lecture. Class attendance is graded.

7- Course requirements:

This is a three-credit course. Therefore, students are expected to spend an average of ten hours per week on the work required for this course. The successful completion of this course requires that students complete their assignments on time and pass the quizzes and final exam. Students are expected:

- i. to take the **open book quizzes** on the syllabus and assigned reading materials.
- ii. to write **two syntheses of reading materials** as assigned. More information on the syntheses is provided below.
- iii. To lead the class discussion on reading materials (group assignment)
- iv. to take **the three closed book quizzes** on specified lectures and reading materials.
- v. To give an **oral presentation** of their research proposal. It is a ten-minute (**10 minutes**) presentation followed by a Q&A session (no more than five minutes).
- vi. To complete the **two drafts of the research proposal paper (2,500 words)**.
- vii. To review one of your colleague’s first draft research proposal paper
- viii. to take the **final written exam** at the end of the semester

8- Grading breakdown:

Assignments	Percentage of final grade
Presentation of research proposal	10%
Synthesis of reading materials	10%
Leading class discussion on reading materials (group assignment)	10%
First draft of research proposal paper: 2,500 words	5%
Reviewer grade	5%
Final draft of research proposal paper: 2,500 words	15%
Assessments	
Open-book Quizzes (online)	10%
Closed-book Quizzes	15%
Class participation	5%
Final written exam	15%

9- Letter grade percentages

Letter grade	Percentage of grade
A+	97 - 100%
A	93 - 96%
A-	90 - 92%
B+	87 - 89%
B	83 - 86%
B-	80 - 82%
C+	77 - 79%
C	73 - 76%
C-	70 - 72%
D	60 - 69%
F	<60%

10- Email communication

In all your email communication with me, please **include your first name and EVPP 337-004 on the subject** and **only use GMU mason live email address.**

11- Assignment submission

All assignments must be uploaded on blackboard by the deadline. Late submission is not accepted. All assignments are individual work of the student. Plagiarism, cheating, lying and copying from other students' work are not tolerated (please see honor code below). No late submission of assignments is accepted. The assignment is no longer available when you miss the deadline.

12- Honor Code:

Adherence to the *GMU Honor Code* is expected of all students. Students are expected to comply with the GMU honor code in completing their assignments and in their interaction with others during the class. Plagiarism, cheating and lying are the main forms of the honor code violation. Students are expected to visit the following link to avoid accidental or intentional violations and understand the consequences: <http://oai.gmu.edu/the-mason-honor-code-2/>.

13- Written assignments:

The written assignments are intended to strengthen the students' writing and analytical skills. There are two different types of written assignments assigned to students in this semester: the research proposal paper and the syntheses of reading materials. In all written assignments, students are expected to prove their ability to write academic English.

The research proposal paper is a written form of the research proposal presentation. However, it includes a full description of the main components of a research proposal. Students are expected to consider the feedback they receive on their oral presentation as they write their paper. Syntheses of reading materials are mainly intended to test the students' understanding of the reading materials and their critical skills. In both papers, refrain from using **unnecessary quotes**. You should always paraphrase the arguments you want to use from different sources.

Your written assignments are graded based on their structure and the quality of their different components. If a required component is missing, you will receive 0 point for it. However, if a required component is covered, your point is still assessed based on its quality. Review your paper before submitting it to avoid grammatical errors and typos. The different parts of your paper should be consistent with one another. They should reflect a clear flow of ideas from paragraph to paragraph.

One of the critical components of each paragraph of your paper is the topic sentence. Your topic sentence is the "topic" or the main idea of your paragraph. It introduces what you discuss in your paragraph. It is a statement that introduces an idea or an opinion that reflects your position (or understanding) pertaining to a particular subject. Don't forget to write it at the beginning of your paragraph and make sure **the remaining sentences in your paragraph support it**.

Use the help offered by GMU if you need assistance to improve your writing skills.

a. Research proposal paper (2,500 words)

The research proposal paper is your course project. It is an essay that demonstrates the ability of the student to describe an environmental issue and propose research that aims to explore one relevant aspect. Students are asked to describe the nature and significance of the environmental issue and to propose different ways to collect and analyze **primary data** in order to investigate one aspect relevant to the issue, such as its causes or its impacts. Students may also propose to conduct various studies to learn more about the seriousness of an environmental issue (its severity or/and extent). Moreover, students can choose to study the effectiveness of existing environmental policies or their implementation to address an environmental issue in a particular location.

The research proposal **is not a research report**. It is not intended to describe the outcome of previous research relative to an environmental issue or some of its aspects. Students are expected to do their own research to choose the appropriate research methods relevant to their research need to explore an aspect associated with an environmental issue they have identified.

The geographical scope of the research proposal is limited to a specific location within one of the African states. While an environmental issue can have different scales, the research proposal assignment is confined to the study of a **local** environmental issue. Restricting the scope of the research proposal to a local environmental issue will help students focus their research on it and provide an in-depth and to the point description of research methods needed to study one aspect related to it.

The research proposal is restricted to the study of one specific aspect of a local environmental issue. While students are expected to provide a clear and comprehensive description of one **local** environmental issue of their choice, their research proposal should only aim to explore **one** aspect related to it. As students concentrate on one aspect of an environmental issue in one location, they are expected to explore the different facets that help to determine it. As an example, the human health impacts of air pollution in a small town depend on the nature and extent of the pollution as well as the exposure and vulnerability of local population to it. Therefore, the research proposal consists of describing the collection and analysis of primary data related to these components in order to determine the human health impacts of the local air pollution.

If a research on one aspect of an environmental issue was conducted at a large scale, it is possible to propose a research that investigates the same aspect at a smaller (or local) scale. As an example, if a report on the causes of deforestation is available in a particular country, it is acceptable to propose a research to investigate such causes in one particular location within that country by collecting and analyzing local primary data.

While there are multiple ways to write a research proposal, a specific format is required in this assignment to encompass all important components. A research proposal is composed of different parts. Although it is often used to secure funding for a project, budgeting is not required. The use of pictures is not allowed as they tend to occupy too much space in your paper. The different parts of your paper should be in harmony with one another. The title of your research proposal should be consistent with your objective and your research methodology.

The main parts of a research proposal paper should include:

- Title page (separate page),
- Introduction,
- Research methodology,
- Conclusion and
- References (APA format).

- i. Title of research proposal

The title reflects the topic or subject matter of your essay and it **should not be too broad**. The topic should **be specific enough to include the aspect you propose to explore in a location within a country in the African continent**. The title should be relevant to a **local**

environmental issue or **environmental policies** in Africa, e.g. “The study of economic impacts of e-waste in Agbogbloshie, Ghana”. It may also be possible to narrow down your title by including specific activities and involved parties relevant to an environmental issue, e.g. “The economic impacts of overfishing on local fishermen in the Bugala island of the Lake Victoria”. Moreover, students can explore the effectiveness of an environmental policy (national or international) or its implementation to address a local environmental issue. As an example, it is possible to study the effectiveness of the government of Kenya to implement its fisheries act to protect its marine resources in a particular fishing village (or city). It is not acceptable to take a title that is already studied or too broad (too difficult to explore). For example, the study of social impacts of climate change in Africa is a topic that may have been studied and does not have a local scope. Don't forget that you must propose to collect **primary data** in your research proposal, i.e. going to the field to collect them.

While you are free to choose your topic based on the above requirements, make sure you find **enough materials** that support your paper. However, you do not have to have complete information on your study location. It is possible to study how a research in one location is applied to your study location. Make sure you do your own research to identify what research methods are applicable to the research area, environmental issue and related aspect you would like to explore. You can also choose to write on topics from the subjects that will be studied during this semester (see schedule below). The title accounts 5% of your paper total grade.

You are required to come up with a **research proposal title** as soon as possible as I must approve it before the start of week 3. In addition, **the research proposal should be presented and discussed in weeks 5 to 7** and the research proposal paper completed in week 13 (first draft). Provide your research proposal **title on blackboard in week 3**.

ii. Introduction

The introduction is the first section of your paper. It introduces the local environmental issue that you chose to describe, and the aspect that you plan to explore based on this issue. It is intended to attract the attention of the reader and guide him or her to understand what to expect in the remaining part of your paper. It carries 35 % of your research proposal paper total grade. It should include at least the description of the local environmental issue (location, nature, extent, significance, stakeholders, etc.), a research objective, and hypotheses.

The description of the local environmental issue should be supported by relevant facts and figures. The significance of the issue and the importance of your research area can be highlighted by stating the potential costs of inaction. Make sure not to describe the results of the research you plan to conduct in your Introduction. As an example, if you choose to do your research on the cause of an environmental issue, you can describe the impacts of the issue and its severity (or extent) in the Introduction. However, you can talk about the result of a research similar to what you plan to do if that research was conducted at a larger scale than yours or at a different location. As an example, you can talk about the social impacts of drought in the Sahel region in your Introduction if you want to do your research on the social impacts of drought in a village (or city) in Niger, which is part of that region.

The statement of the objective of your paper or presentation is crucial in the Introduction. As it is a research objective it should aim to explore or investigate an aspect relevant to the local environmental issue that you chose. For example, your objective can be to explore the economic causes of deforestation in a village in Tanzania. You should only have **one** research objective exploring only one aspect relevant to the local environmental issue. Your objective should be consistent with your title. If the title is not specific enough to infer your research area, your objective should do so. As an example, if your title is the depletion of fish stock in a Kenyan river, your objective may either explore the causes or the social impacts of this issue and identify a more specific location.

Hypotheses are part of the main components of your Introduction. They refer to an educated guess, expressed by a statement that shows a correlation between dependent and independent variables. This correlation helps to provide a prediction of the outcome of the research you propose to conduct. Your hypotheses should be relevant to your research objective and determine the different elements of your research methods. You should have at least **two** hypotheses that are derived from the research objective. Students are encouraged to identify the variables (dependent and independent) that make up the hypotheses by doing some research on potential correlated aspects relevant to the research objective. If your research objective is to explore the causes of a local environmental issue, the aspects that reveal the issue would constitute the dependent variables while the factors that may have generated these aspects represent the independent variables. As an example, the issue of overfishing may be expressed by a significant decline in fish catch over time or the depletion of certain (vulnerable) fish species in a local coastal area. The significant catch of juvenile fish and degradation of fish habitats caused by the prevalence of the use of destructive fishing methods and unsustainable tourism activities are potential factors that may lead to both decline in fish catch and loss of certain species. In this case, the dependent variables are the amount of fish catch or/and the population of certain (vulnerable) fish species while the prevalence of the different fishing methods and the nature of coastal tourism activities constitute the independent variables. The research methodology explains how the independent and dependent variables are correlated as you test your hypotheses by analyzing the primary data you propose to collect.

iii. Research methodology

The research methodology is the most important part of your paper as it describes the different ways you will conduct your research based on your research objective and hypotheses. It accounts 35 % of the total research proposal paper grade. As your research aims to explore the correlation between independent and dependent variables, it is intended to collect and analyze data relevant to these variables in order to test your hypotheses. The research methods that you chose are therefore relevant to the data that you need and the way you plan to analyze them to test your hypotheses. Answering four specific questions helps you provide a comprehensive description of your research methodology. These questions include: what method is relevant to your research? what primary data do you need? why is your research method relevant to your data? and how do you collect and analyze your data?

Firstly, the research methodology should describe the research methods that you propose for your research by providing some information about their nature, their objective and the types of primary data that may be collected and analyzed through their use. You are welcome to use natural or social science in your research methods based on your research objective. As an example, the use of cost-benefit analysis is an economic research tool that can be used in social science while population ecology is a branch of natural science that helps to understand the dynamics of species population. At this stage, the explanation of the research methods is limited to its description and its application to a known case. It should not refer to your research project as you will have the chance to explain why these methods are relevant to the data you need. Instead, you can provide some examples of the use of the proposed research methods in other research cases. Since you are expected to collect primary data, it is not acceptable to propose desk research to collect secondary data as your main research method.

Secondly, the research methodology describes the primary data that you need based on your variables identified in your hypotheses. You are welcome to use social and natural data. Social data are data that can be collected through the use of research methods associated with social science while natural data are collected with the use of natural science. As an example, average income level of a fishing community is social and economic data while the health of coral reefs along the shore of Kenya is natural data. Moreover, you are required to propose the collection of measurable (quantitative) data in your research in order to determine the correlation between the variables. However, spatial data are also acceptable to test your hypotheses. It is important to emphasize that the research proposal should mainly collect primary data. You are therefore expected to describe the original data that you plan to collect and analyze.

Thirdly, you should describe the reason why your research methods are relevant to the (primary) data that you need. The choice of your research methods is mainly related to the data you plan to collect and analyze. However, you can also choose relevant factors that support the choice of your research methods. As an example, you can explain that the research methods produce the same data that you plan to collect and that they can also be used to analyze them.

Finally, you should describe how you will collect and analyze your data. This step may be part of the research method that you have chosen. If underwater survey is the research method that you choose to study the health of the marine ecosystem, the method for collecting data related to this method may consist of counting the number of certain fish species or taking sample of corals to learn about their health. Likewise, if water quality assessment is the research method, collecting water sample and living aquatic organisms may help determine the quality of the water. Some information about the research participants and equipment that you plan to use for your research may also be described in your research methodology.

The analysis of your data is the process that you propose to test your hypotheses. You may propose to compare data collected from different sites in order to test your hypotheses. Data collected from two different locations that may have similar physical, social and economic conditions may be compared to identify some similarities and differences relevant to the variables in your hypotheses. In addition, you may use different analytical tools to analyze your data. Geographic Information System (GIS) is an example of tool that can be used to analyze

spatial data. While it is not required to fully understand the use of an analytical tool, students are encouraged to make their own research to inquire about how the tool was used elsewhere in order to provide a sufficient description of their research methodology. Statistical tool is an important way to analyze data. However, students are only required to propose their statistical analysis at the sample level (not population). In other words, the use of inferential statistics is not within the scope of this course.

iv. Conclusion

The conclusion carries 20% of your paper total grade. It includes the restatement of your hypotheses, a summary of the different parts of your paper, what you might expect from your research, your opinion, and policy alternatives that would address the issue based on your expectations. Policy alternatives incorporate various policies that the Government may need to develop to address the issue based on the potential outcomes of the research. Use different policy instruments when necessary.

v. References

The references should follow **the APA citation format. Do not forget to include in-text citations** throughout your paper. **Two references should be published materials (peer-reviewed) from scientific journals.** You should have at least six (6) references that may include official government documents. You can also use United Nations, International Organizations and Non-Government Organizations official reports and policies. You should **use all listed references** in your text, using proper **in-text citations** (APA format). The references account 5% of the total grade of your paper.

vi. Format

Your research proposal assignment should be in word document (.doc or .docx), **double spaced** except the references, page numbered, and in Times New Roman 12 points. No pictures are permitted in the paper. Please **do not use pdf!**

vii. Miscellaneous

You will write the research proposal in two drafts - first and final. The first draft will receive the comments you need to write your final draft. However, both drafts are graded. Therefore, write the first draft as though it is your final. You are given plenty of time to write your first draft, so make use of that time to submit a good quality paper.

b. Feedback on your colleague's research proposal paper:

You are expected to submit two drafts of your research proposal paper. The first draft will receive comments from one of your colleagues and your professor. Although it is a first draft, write it as though it is your final draft because it is graded.

Please provide constructive feedback on your colleague's research proposal paper. The purpose of this task is to help your colleagues improve their paper and for you to learn from them. I will assign the student who will review your paper. **You do not grade your colleague's paper.** Use this syllabus as a reference while reviewing your colleague's paper. You will receive a grade as a reviewer.

You should revise your paper based on my comments and those of your colleague if they are approved and submit it as a final draft. **Please include a copy of your first submission when submitting the final version of your research proposal paper.**

c. Synthesis of reading materials

A synthesis is a piece of writing drafted through the lens of key aspects highlighted in the reading materials. Not only does the synthesis demonstrate the student's knowledge of the reading materials, but also his or her ability to analyze them. Students learn best by making connections between their prior knowledge and the subjects they learn in class. The main purpose of the synthesis is to make these connections by identifying, discussing some key aspects that are commonly highlighted by the reading materials and analyzing them based on student's prior knowledge or understanding of these aspects in order to adopt a new perspective. In light of this, students are required to identify three common key aspects that are highlighted in the materials. The key aspects are statements or arguments that reflect the opinions or positions, commonly shared by the authors of the reading materials. An example of key aspect would be: "The development of an environmental policy can adopt several approaches". **Each key aspect should be discussed in a paragraph separately.** The synthesis is an essay composed of five to six paragraphs. Like any essay, it is divided into three main parts: an introduction, a main body and a conclusion. Please use headings and subheadings to show clearly the different parts of your paper.

i. Introduction (one to two paragraphs)

The Introduction includes five items. Firstly, it introduces and provides a brief explanation of the main topic (or subject) that is relevant to the reading materials. Secondly, it introduces the titles of the reading materials that are synthesized in this paper. Thirdly, it should provide a **brief** summary of the materials in a paragraph to show your knowledge and understanding (write at least three sentences for each material). Fourthly, you should clearly state the objective of your paper. Finally, you should provide a statement that expresses the different parts of the main body of your paper, which are the three key aspects that you plan to discuss.

ii. Main body (use the key aspects as subheadings)

Since you should at least discuss three key aspects, this section is composed of at least three paragraphs. The discussion of a key aspect is a paragraph that not only describes it, but also **compares and analyzes** the different opinions of the authors of the reading materials pertaining to it. At least, the discussion includes a topic sentence, which is the statement of the key aspect, followed by a brief explanation and comparisons of the authors' viewpoints on the key aspect, and **your own opinion** on these viewpoints. **Use the name of authors** as you compare their viewpoints (not the title of the reading materials). Make sure the arguments you use in the discussion support your topic sentence.

iii. Conclusion

The conclusion is a paragraph that summarizes the synthesis and states the lessons learned and new perspectives of the student.

As the semester progresses, the students should have read several articles and mastered some concepts in environmental science and policy. It is recommended that students show the new

perspectives they drew out of past synthesis assignments while writing new syntheses by establishing some links between past and new key aspects. In this way, the students can monitor their progress in learning new subjects taught in this class.

iv. Format

There is no limit on the number of pages of the synthesis, but it has to be a **single-spaced** paper. Typically, the weekly synthesis is about two to three pages at the beginning of the semester, but it can be longer by the end of the first half of the semester. Again, use only word document (.doc or .docx), and Times New Roman 12 points. Do not use pdf!

14- Oral assignments:

a. Presentation of the research proposal (individual assignment):

The presentation of the research proposal is intended to strengthen the presentation skills of the students. It presents only the most important information in the research proposal paper. Your research proposal is a research project and your goal is to convey some information that highlights an environmental issue and the way you propose to produce and analyze scientific data that help to address it. It should be given during weeks 5 to 7 and last **ten minutes**. A five minute-questions/answers session follows the presentation.

When you give your oral presentation, please **dress professionally** as if you give your presentation in a conference, i.e. no jeans. You are graded based on your attire. You are also graded based on the clarity and content of your presentation. Be enthusiastic, greet your audience, **make eye contact**, speak up and show your interest and knowledge of your topic.

Use Microsoft power point only for your presentation. Refrain from putting **too much information on your slides, just use bullet points**. Do never copy and paste from your research proposal paper. Your presentation does not necessarily include everything in your research proposal paper, but it should at least include **facts and figure, objective, hypotheses, research methodology (what, why and how questions), and conclusion (summary, expected results, policy alternatives or recommendations)**.

You will also be graded based on the way you handle the questions. Make sure you engage your audience by making your presentation interesting. During the QA session, you may want to paraphrase the questions you receive to show that you understand them correctly.

Duration: 10 minutes + five minutes for questions and answers.

b. Class discussion leading assignment (group assignment):

A group of two to three students will lead the class discussion about the assigned reading materials of the week. This assignment is intended to train students to facilitate discussions and to improve their knowledge of the subjects taught in this course. The objective of this exercise is also to make sure students have common understanding of the key points highlighted in the reading materials. Additionally, it is a way to check the students' knowledge of the materials. The leading group facilitates, steers and monitors the class discussion in order to draw a meaningful conclusion from it.

The leading group needs to meet before the class discussion takes place to prepare for it. A group leader is selected from the leading group. He (or she) will introduce the reading materials

and state how the discussion is organized. Each member of the leading group provides a brief synopsis of each reading material, highlighting some key aspects before the class discussion starts. The introduction should only last **4 to 6 minutes**.

The leading group should prepare some questions relevant to the reading materials before the class discussion. The questions should inquire about the understanding of the materials. They should not be too specific, asking superficial information from the materials, such as numbers and dates. It is crucial that the **leading group make sure that everyone participates in the class discussion**.

The leading group has different options to conduct the class discussion. As an example, the class may be divided into groups to discuss possible answers to questions relevant to the reading materials. It is also possible to organize a game that encourages competition between groups or individual students for answering the questions. As an example, a jeopardy (jeopardy rock) or kahoot can be organized to ask questions to students after the Introduction is given. (**Duration: 24 to 26 minutes**)

The leading group is given one minute to prepare a conclusion at the end of the class discussion. The conclusion is a compilation of the key points and important concepts identified by the class during the class discussion. The group leader is in charge of presenting it to the class. (**2 to 3 minutes**)

Do not use power point presentation as you lead the discussion.

Duration: 30 minutes (Introduction, Questions and Answers session or class activity and conclusion)

15- Quizzes:

There are two different types of quiz: open book and the closed book. While the open-book quizzes are graded they are mainly intended to guide students to identify some key information in the reading materials and direct their attention to some important points relevant to this course. Students are required to read carefully their reading materials and lecture slides before taking the open book quizzes by the end of the week **as homework**. The closed book quizzes are however intended to assess the students' knowledge and understanding of the course materials and can only be taken **in class with your laptop computer**.

The quizzes generally include multiple choice questions with single or multiple answers. However, they may consist of short or long-answer questions. Occasionally, I will ask you to write a short essay. Students are given plenty of time to take the open book quizzes. However, they are timed quizzes. Once started the open book quizzes can be taken for one hour.

16- Exam:

The exam will take place at the end of the semester. It is a comprehensive exam, i.e. it covers everything that was taught during the semester. Study carefully the lecture slides and review some important points highlighted in the reading materials to prepare for your exam. You

should also review the past quizzes to get prepared for it. The exam is just like a longer quiz. Therefore, **you have to bring your laptop computer** to class when you take it.

17- Class policy:

Students are required to:

- Respect their classmates and instructor
- Avoid side talking when others speak
- Refrain from using cell phone
- Use Computer **only for in-class activity**
- Raise their hand if they want to speak and give enough time for others to speak as well.
- Any violation of this class policy may result in penalty that is determined by the professor. A repetitive violation of the policy is subject to stringent penalty that may include a grade F for class participation.

18- Student support resources

Here are some important GMU website links that may help students succeed in their studies:

University Catalog at <http://catalog.gmu.edu/>

University Policies at <http://universitypolicy.gmu.edu/>

Counseling and Psychological Services at <http://caps.gmu.edu/>

Learning Services at <http://caps.gmu.edu/learningservices/>

University Career Services at <http://caps.gmu.edu/learningservices/>

University Writing Center at <http://writingcenter.gmu.edu/>

19- Course schedule

Date	Week/Topics/Reading materials/Due/Class activities
January 20 th	<p style="text-align: center;"><u>Week 1</u></p> <p>NO class: Martin Luther King Day Read the syllabus and upload your statement on blackboard to confirm that you have done so by Sunday January 27th at 11:59 pm.</p>
January 27 th	<p style="text-align: center;"><u>Week 2</u></p> <p>Topics: -Course Overview -Syllabus - Written assignment overview: Research proposal and synthesis of reading materials - Oral assignment overview: Leading class discussion and presentation of research proposal - Environmental Issues</p> <p>Reading materials: -Africa Environment Outlook 3: Our Environment, Our Health: A summary for Policy Makers. UNEP, 2013 (Pages 5 to 22) - UNEP Yearbook 2014. Emerging issues in our environment Pages 13-16; 25-28 and 43-46 - YouTube video material: E-Waste Hell (17 minutes)</p> <p>Assignment: Complete the reading assignment before class Assessment: Due Sunday February 2nd at 11:59 pm Complete the open-book quiz on syllabus, reading materials week 1-2 and assigned video</p> <p>Class activities: - Lecture - Scheduling research proposal presentation and leading class discussion assignment (group assignment)</p>
February 3 rd	<p style="text-align: center;"><u>Week 3</u></p> <p>Topic: Environmental Science</p> <p>Reading materials: - Conservation social science: Understanding and integrating human dimensions to improve conservation. Bennett et al, 2017 - Science and conservation: A history of natural and political landscapes. Stephen Bocking, 2018</p> <p>Assignment due on Saturday February 8th by 11:59 PM: Post the title of your research proposal on blackboard and confirm that you have read the syllabus Assessment due on Sunday February 9th by 11:59 PM: Complete the open-book quiz on reading materials and lecture slides of week 3.</p> <p>Class activities: - Lecture - Class discussion led by 1st group (30 min): reading materials of week 3</p>

<p>February 10th</p>	<p style="text-align: center;"><u>Week 4</u></p> <p>Topic 1: Environmental Policy process Reading materials:</p> <ul style="list-style-type: none"> - IDS Working Paper 89. Understanding Environmental Policy Process: A Review. Keeley and Scoones. Pages 3-6 - Understanding policy processes: a review of IDS research on the environment. Pages 7-14 - Integrated Policy Making for Sustainable Development. A reference manual. UNEP. Pages 14-20. <p>Topic 2: Environmental Policy in Africa Reading materials:</p> <ul style="list-style-type: none"> - An introduction to the African Convention on the Conservation of Nature and Natural Resources. IUCN, 2004 (pages 1-16) <p>Assignment due on Monday February 10th by 07:00 PM: Complete your reading assignment, and write and post your 1st SYNTHESIS OF READING MATERIALS of week 4 (only use materials in week 4) by the deadline</p> <p>Assessment due on Sunday February 16th by 11:59 PM: Complete the open-book quiz on reading materials and lecture slides of week 4.</p> <p>Class activities:</p> <ul style="list-style-type: none"> - Lecture - Class discussion led by 2nd group (30 min) on reading materials of week 4
<p>February 17th</p>	<p style="text-align: center;"><u>Week 5:</u></p> <p>Presentation of research proposal: 8 students Assignment for 1st group students only: Upload your presentation before class.</p>
<p>February 24th</p>	<p style="text-align: center;"><u>Week 6</u></p> <p>Presentation of research proposal: 8 students Assignment for 2nd group students only: Upload your presentation before class.</p>
<p>March 2nd</p>	<p style="text-align: center;"><u>Week 7</u></p> <p>Presentation of research proposal: 8 students Assignment for 3rd group students only: Upload your presentation before class.</p>

<p>March 9th</p>	<p style="text-align: center;"><u>Week 8</u></p> <p style="text-align: center;">RECESS NO CLASS</p>
<p>March 16th</p>	<p style="text-align: center;"><u>Week 9</u></p> <p>Topic: Thematic Environmental policy- Marine Policy</p> <p>Reading materials:</p> <ul style="list-style-type: none"> - Marine Policy Overview: Hoagland and Ticco, 2001 http://www.whoi.edu/science/MPC/dept/meetings/Luce_presentations/MarinePolicyOverview.pdf - Policy Implications in the Management of Kenya’s Marine Protected Areas. Economic Valuation and Policy Priorities for Sustainable Management of Coral Reefs. Pages 205-210 - Social impacts of marine protected areas in South Africa on coastal fishing communities <p>Assignment due on Monday March 16th at 07:00 PM</p> <ul style="list-style-type: none"> - Write and post your 2nd SYNTHESIS OF READING MATERIALS of week 9 (only use the materials in week 9) <p>Assessment due on Sunday March 22nd at 11:59 PM: Complete the open book quiz on lecture slides of week 9</p> <p>Class activities:</p> <ul style="list-style-type: none"> - Lecture - Class discussion led by 3rd group on reading materials of week 9 (30 min)
<p>March 23rd</p>	<p style="text-align: center;"><u>Week 10</u></p> <p>Topic: Sustainable Development</p> <p>Reading materials:</p> <ul style="list-style-type: none"> - Sustainable Development and Planetary Boundaries, Rockstrom and Sachs, 2013 - Watch video on Youtube: The Age of Sustainable Development by Jeffrey Sachs, 2015 - Accompanying slides - Safe operating system for humanity <p>Assignment: Complete your reading assignment</p> <p>Assessment due on Sunday March 29th at 11:59 PM</p> <p>Complete the open-book quiz on reading materials and lecture slides of week 10</p> <p>Class activities:</p> <ul style="list-style-type: none"> - Lecture - Class discussion led by 4th group on reading materials of week 10 (30 min)

<p>March 30th</p>	<p style="text-align: center;"><u>Week 11</u></p> <p>Topic: Sustainable Development and the role of the United Nations</p> <p>Reading materials:</p> <ul style="list-style-type: none"> - Report of the World Commission on Environment and Development: Our Common Future. Gro Harlem Brundtland. Oslo, 20 March 1987. Part 1 Chapters 1 and 2 - Getting Started with the Sustainable Development Goals. Guide to stakeholders. Sustainable Development Solutions Network. December 2015. Chapter 1 - MDG Report 2015. Goal 7 <p>Assignment: Complete your reading assignment Assessment due on Sunday April 05th at 11:59 PM</p> <p>Complete the open-book quiz on reading materials and lecture slides of week 11</p> <p>Class activities:</p> <ul style="list-style-type: none"> - Lecture - Class discussion led by 5th group on reading materials of week 11 (30 min)
<p>April 6th</p>	<p style="text-align: center;"><u>Week 12</u></p> <p>Topic: Thematic Sustainable Development: Distant-Water Fisheries</p> <p>Reading materials:</p> <ul style="list-style-type: none"> - China's distant water-fisheries in the 21st century - Fishing for Answers: Understanding Drivers and Environmental Impacts of China's Distant Water Fishing Fleet By Katie Lebling - Financing EU Distant Water Fishing in Developing countries. Contribution from the Coalition for Fair Fisheries Arrangements. Béatrice Gorez. - Fishing Moratoria and Securing Turfs: Creating opportunities for future marine resource abundance in the face of scarcity in Western Africa. Anastasia Telesetsky <p>Assignment: Complete your reading assignment Assessment due on Sunday April 12th at 11:59 pm: Open book quiz on reading materials and lecture slides of week 12</p> <p>Due: None</p> <p>Class activities:</p> <ul style="list-style-type: none"> - Lecture - Class discussion led by 6th group on reading materials of week 12 (30 min) - CLOSED-BOOK QUIZ 1 on lecture and reading materials assigned in weeks 9, 10 and 11. It is a timed and closed book quiz. Bring your laptop computer to class to take it.

<p>April 13th</p>	<p style="text-align: center;"><u>Week 13</u></p> <p>Topic: Climate Change and its impacts Reading materials:</p> <ul style="list-style-type: none"> - African voters indicate lack of support for climate change policies - Climate Change 101- The science and Impacts - Climate system-An overview - Climate and Africa <p>Assignment 1: Complete your reading assignment Assignment 2: due on Monday April 13th at 11:59 PM: FIRST DRAFT OF RESEARCH PROPOSAL PAPER</p> <ul style="list-style-type: none"> - Post the first draft of your research proposal paper on BB - Submit the HARD COPY of the first draft of research proposal paper in class <p>Assessment due on Sunday April 19th at 11:59 PM Complete the open-book quiz on reading materials and lecture slides of week 13</p> <p>Class activities:</p> <ul style="list-style-type: none"> - Lecture - Class discussion led by 7th group on reading materials of week 13 (30 min)
<p>April 20th</p>	<p style="text-align: center;"><u>Week 14</u></p> <p>Topic: Deforestation in Africa Reading materials:</p> <ul style="list-style-type: none"> - The Challenge of deforestation in Tropical Africa: Reflections on its principal causes and solutions - Deforestation in Madagascar: Consequences of Population Growth and Unsustainable Agricultural Processes - The dragon and the giraffe: China in African forests <p>Assignment 1: Complete your reading assignment Assignment 2: Bring to class your COLLEAGUE’S FIRST DRAFT OF RESEARCH PROPOSAL PAPER with your COMMENTS</p> <p>Assessment due on Sunday April 26th at 11:59 PM Complete the open-book quiz on reading materials and lecture slides of week 14</p> <p>Class activities:</p> <ul style="list-style-type: none"> - Lecture - Class discussion led by 8th group on reading materials of week 14 (30 min)

<p>April 27th</p>	<p style="text-align: right;"><u>Week 15</u></p> <p>Topic: Biodiversity loss Reading materials:</p> <ul style="list-style-type: none"> - What is biodiversity? Fact Sheet, UNEP 2010. - Biodiversity loss and its impact on humanity. Cardinale <i>et al.</i>, 2012. - Biodiversity and Ecosystem Functioning: Current knowledge and future challenges. Loreau <i>et al.</i>, 2001 - State of Biodiversity in Africa 2010. UNEP <p>Assignment: Complete your reading assignment Due: Reviewed First draft of research proposal paper is returned to students Assessment due on Sunday May 3rd at 11:59 pm: Open book quiz on reading materials and lecture slides of week 15</p> <p>Class activities:</p> <ul style="list-style-type: none"> - Lecture - Class discussion led by 9th group on reading materials of week 15 (30 min) - CLOSED BOOK QUIZ 2 on lecture and reading materials assigned in weeks 12, 13 and 14. It is a timed and closed book quiz. Bring your laptop computer to class to take it.
<p>May 4th</p>	<p style="text-align: right;"><u>Week 16</u></p> <p>EXAM PREPARATION SESSION: NO CLASS</p>
<p>May 11th</p>	<p style="text-align: right;"><u>Week 17</u></p> <p><u>Due:</u></p> <ul style="list-style-type: none"> - Upload the final draft of your research proposal paper by Monday, May 11th at 07:00 pm - Submission of the hard copy of final draft of research proposal paper (include your first draft that has comments) <p><u>Final EXAM</u> Bring your laptop computer to take the exam</p>

N.B.: This syllabus is subject to change