

A History of Sustainability at St. Mary's College

An Independent Sustainability Project
Submitted for Consideration to Professor Barry Muchnick
For ENST 450: Applied Sustainability Practicum

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For my project I am looking at the history of sustainability at St. Mary's College, through the different research and projects that have been done. Over the years there have been countless environmental projects and research done but not an easy way to access it. As a part of my project I hope to compile most of this information and have it in an easy accessible location on the St. Mary's website. As I gather this data I plan on documenting ways in which St. Mary's can improve their sustainability efforts. While our school has made strides in the right direction there is much more to be done. One of my main focuses for this project will be sustainability through the curriculum. I am currently in the process of creating a survey to send out to the professors of St. Mary's. This survey will be a sustainability course evaluation report and will allow professors to vocalize a course they teach that they believe incorporates sustainability. This survey will also allow professors to begin to formulate ideas for future classes within their discipline that incorporate sustainability. This project will encapsulate sustainability efforts that have happened already at St. Mary's and those that are to come in the future.

Introduction:

St. Mary's College of Maryland is located on the St. Mary's River allowing for unique environmental learning experiences. While we have a strong commitment to our surrounding environment as well as on the broader scale we must capitalize on our location. Having a school immersed in the wildlife surrounding us allows our students and faculty to be involved with something greater than the university and connect with the wider community. However we at St. Mary's do not always take advantage of our surroundings. While sustainability has been integrated into the St. Mary's campus for many years due to its location as well as its faculty, there are still ways to improve our campus and our efforts towards sustainability. My goal is to document some of the important sustainability history here at St. Mary's and then provide some insight on how we might be able to improve and advance over the next few years using the information from past successes.

Sustainability is defined as meeting our present needs without reducing the future generations ability to provide for themselves. Sustainability includes all facets of life such as, economic, social, and environmental. All three of these aspects play an important part in sustainability and it is imperative that people understand the importance of sustainability and are environmentally literate. One of the most influential ways to show people the gravity of sustainability is through education. Here at St. Mary's there have been there have been numerous green initiatives to enhance our sustainability including clubs, and coalitions, however there is always room for improvement.

St. Mary's has been moving in the right direction towards sustainability and green initiatives it has just taken us awhile. In 2005 the first class graduated with the cross-disciplinary Environmental Studies minor, and throughout the years there has been a push from students and faculty to create an Environmental Major. The Environmental Studies minor focuses on educating students about the environment and sustainability through cross-disciplinary courses. While this is great, our unique core curriculum would allow us the opportunity to incorporate sustainability throughout all disciplines and all degrees. Learning about sustainability through disciplines allows for a greater understanding in students because they are not just obtaining information from one class. Students would be able to look at sustainability through multiple lenses and compare and contrast the information they are being taught. There are a few Colleges that have incorporated sustainability in their core curriculum and St. Mary's would benefit from looking at their methods.

Throughout this project I have gathered information about the past sustainability initiatives here at St. Mary's. The projects that have been undertaken are extremely important and should be easily assessable to the community. It is important that we celebrate what we have done in the past in order to keep growing and thriving. It is my goal to gather this data and have it be made more public in order for people to understand the importance of what we have done. I also will be looking at what we can do in the future. We have made great strides over the years but it is time to really maximize our potential for sustainability here at St. Mary's. I have included a few case studies in which provide excellent examples of integrating sustainability

within a college campus. We could really learn from these programs and truly grow as an institution.

Overview:

In 1992 there was a major point for sustainability at St. Mary's, when the college was invited to submit a grant to the PEW Charitable Trust. This grant initiative was for active learning, things such as field trips, and projects. Professors from different disciplines, including Robert Paul (Biology) and professor's from other disciplines collaborated to write and submit this grant. This project took two to three years but it deemed itself worthy. When St. Mary's was awarded this grant, students were hired to help facilitate active learning into the curriculum. Faculty also met in the summer in order to incorporate environmental studies into the curriculum. The professors that met during the summer were the ones who then went on to create courses for the environmental minor. Classes were created that had an environmental focus but also focused on active learning. Classes like the contemporary bioscience with an environmental focus were created, which then went on to become a part of the Environmental Studies minor. The efforts of the PEW grant helped motivate the college to create an Environmental Studies minor.¹

The History of St. Mary's River Project:

Another important aspect of St. Mary's focus on the environment is the St. Mary's River Project. This project started with a grant from the Environmental Protection Agency in 1999. Dr. Paul and Dr. Tanner obtained this grant in order to begin collecting data about the water quality in the St. Mary's River. The project

¹ Interview with Bob Paul

lasted almost ten years, ending in 2008. It had a huge impact and incorporated a large amount of participation from students, with up to fifty students a semester working on the project per semester. Water data quality gathered from this project has gone on to provide essential information for the EPA. When the Clean Water Act was put into place the EPA was criticized for not being more stringent on making states and counties comply with the appropriate standards. As a result the EPA began enforcing the standards and St. Mary's county had found itself on the impaired list. In order to remove itself from this list and avoid being fined the county must adjust its standards. Out of this came the Watershed Implementation Plan, WIP. Over the summer students gathered all of the data gathered by the SMRP and compiled it into a document, these reports were published in 2008 and given to the EPA and DNR. The St. Mary's Watershed Association that had been contracted to assist the county in complying with the Clean Water Act has used the reports students compiled in 2008 from the SMRP. This week WIP is just finishing up its project in hopes of removing St. Mary's County from the impaired list. After the last data collection in 2008 the project transitioned into a club to educate local fifth graders. Students from St. Mary's travel to local elementary schools once a week where, in groups of three to five they teach fifth grader the importance of the Chesapeake Bay as well as the local environment. In these sessions students are taught the importance individuals have on their environment and instill some environmental stewardship. There are around twenty to thirty students that volunteer their time to travel to three different schools once a week over an eight-week period.

In the beginning the St. Mary's river project allowed students to participate in hands on learning. They were not only learning about the importance of the Bay and water quality they were able to participate in taking water samples and examining the data and knowing that their data would contribute to the greater good. Hands on learning is the best way to engage students as well as the best way to get a point across. The SMRP helped educate students on how we truly do affect our surroundings and the importance of sustainability. This project was an active learning experience and the faculty and students involved gathered valuable water quality data that is still being used today. Our community needs to be aware of this project as well as what has stemmed from it.

In addition to the EPA grant, a grant from National Fish and Wildlife Foundation was obtained in 2002 and dedicated to watershed improvement. This grant engaged local citizens as well as students from St. Mary's to raise awareness about the water quality of the St. Mary's River. Local citizens created the watershed coalition, which morphed into the St. Mary's River Watershed Association in 2005. The Watershed Association worked along side the St. Mary's Project in order to collect data about water quality in the St. Mary's River. Then in 2012 the Watershed Association started oyster restoration in the St. Mary's river. This project involved the college and St. Mary's students in order to create the oyster restoration area. The state eventually deemed the St. Mary's River an Oyster Protection area. ²

² Interview with Bob Paul

These efforts included the community as well as St. Mary's students allowing for different perspectives to come together and learn about our surrounding environment and protect it. This was a fantastic opportunity for students to be a part of something within the larger community. It also, much like the SMRP allowed students to appreciate our surrounding environment and understand the importance of it. Our surrounding environment is an extremely important and delicate ecosystem. Through these projects students were able to understand the importance of sustaining it. These efforts should be recorded for the public, as well as continued on in years to come.

Student Designed Majors:

In 2009 six percent of St. Mary's students graduated with the Environmental Studies minor which made it the most popular minor that year.³ Along with a large interest in the minor students expressed interest in majoring in Environmental Studies or a related field. The Student Designed Major allows students to create their own major that the college does not provide. The SDM requires students to use at least three different disciplines that the college does provide in order to create a cross-disciplinary major. Since 2004 through May 2017 there have been thirty Student Designed Majors that have incorporated the environment into their major.⁴ Soon enough St. Mary's will have an Environmental major, but until then students will have to continue creating their own major. The SDM allows us a look into how sustainability can be worked into any department. Students must connect three different disciplines in order to create their major, and through this learning

³ Climate Action Plan

⁴ E-mail correspondence with Ruth Feingold

experience they are able to integrate ideas of sustainability within the departments that they have chosen. This information could be very useful for current students interested in SDM as well as perspective students, and professors. Even though we will hopefully have an Environmental Studies major soon it would be nice to have an accessible record of what has been done in the past. It will give an inside perspective on what classes environmentally focused students have taken and may even spark some ideas for new environmental classes. If professors see that their discipline had been used in the past for someone's environmental SDM they realize sustainability could be easily incorporated into some of their classes. There is not currently a list of the disciplines that students have incorporated into their environmental SDM, however this list could be put together. The actual major proposals are confidential, however it would be possible to compile a list of the disciplines used for these majors. So while this paper may be finished this project is still in the works. I hope to work with Dr. Ruth Feingold to gather the list of disciplines used then this information could be put on the environmental website so it is easily accessible to potential students, current students as well as professors.

Core Curriculum:

The St. Mary's Core Curriculum was implemented in 2008 in order to ensure St. Mary's students were receiving a true liberal arts education. Our core curriculum requires students to take a range of classes from the fine arts to the sciences. This ensures that students are well versed in a variety of disciplines as well as issues that certain disciplines focus on. The core curriculum challenges students to think

creatively and critically, taking them outside of their comfort zones and pushing them to have a global perspective. Our liberal arts education at St. Mary's focuses on critical thinking, information literacy, written expression, and oral expression. Through the core curriculum students at St. Mary's are introduced to a wide array of disciplines and are able to truly enhance their education. The Core 101 Seminar, which is a requirement of the Core Curriculum, provides a gateway into the St. Mary's way for freshman. There are thirty Core 101 Seminars offered each fall semester and there have been seminars in the years 2013, 2014, and 2015 that have had an environmental focus. Some of these seminars have included, Can We Save the Chesapeake Bay taught by Dr. Bob Paul, A Softer Energy Footprint taught by Dr. Andy Koch, Energy Options: Nuclear and Otherwise taught by Dr. Walter Hill, Campus Ecology taught by Dr. Bob Paul, and Is it just Progress" taught by Dr. Andy Koch. While these seminars offer a place for students to get involved and discuss environmental issues of our world, only two are normally taught each year.

These seminars are a great addition to the Core Curriculum there is room for improvement and advancement in the realm of sustainability. Below I discuss a university in which they have required their students to choose a pathway for their undergraduate experience. The pathway experience is a good example of something that St. Mary's could build on. Instead of creating pathways we could focus on sustainability and require students to take at least one course related to sustainability each year, regardless of their major. In order for this to work we would need to create courses with a sustainability focus throughout most disciplines. This way students would have the option to choose courses within

their major to complete the requirement. This requirement would allow students of all disciplines a chance to recognize the importance of the environment as well as sustainability.⁵

St. Mary's Project:

St. Mary's Projects are an important aspect of St. Mary's College and allow students to embark on a project of their own design. Students must work closely with a mentor during their eight credit, year long capstone project. The St. Mary's Project is a chance for students to truly engage their learning and dive into a topic that they are truly passionate about. Then when the students are finished their projects they must present their findings to the St. Mary's community. SMP's offer a perfect opportunity for students pursuing an Environmental Minor to research a topic pertaining to the environment. About one third of Environmental Minors do complete an SMP with an environmental focus.

Currently there is not a database in which to access these SMP's or other sustainability projects, however you can search through SMP's through the St. Mary's website if you have a key word. In order to have an accurate and successful search you need to know what you should be searching for. In order for me to find the most environmental based SMP's I had to make an appointment with Kent Randell the college archivist. He knew exactly what to search for and what keywords to use in order to have a complete search. See **appendix 1** for the list of SMP's we found. This is not an easy accessible way to search for environmental

⁵ <http://www.smcm.edu/academics/corecurriculum/>

SMP's or sustainability projects because people do not have time to make an appointment with Kent Randell every time they would like to search for something. Nor does he have time to meet with everyone interested in accessing these projects. These projects hold vital information for students along with professors; they allow us to recognize initiatives past students have taken in the realm of sustainability. We need to have past information in order to move forward and expand our growth. In the past the library tried to create an institutional repository for research that was done by St. Mary's students and faculty but due to lack of interest it never happened. It seemed like a lost cause until recently the USMAI (University System of Maryland and Affiliated Institutions), the library consortium, decided to create a shared institutional repository. St. Mary's has an opportunity to be a part of this institutional repository, which will begin later this year. The USMAI is creating recommended policies for the information and content that will be accepted. Our library is extremely eager to be a part of this project and believes that starting with student sustainability research projects would be an excellent choice to showcase first. Hopefully we can be a part of this project because having student and faculty sustainability research projects available for the public would allow for future student research projects. Other universities could look at the data we have gathered here at St. Mary's and would be able to expand their own research. Creating an IR would not only benefit St. Mary's it would have the potential to affect other universities and truly make a significant impact on the world. ⁶

⁶ E-mail Correspondence with Kent Randell

Environmental Minor:

In order to graduate with an Environmental minor you must have at least twenty-two credit hours in courses that have an environmental focus. Students must also complete two credits of Environmental Perspectives, Contemporary Bioscience with an environmental focus or Ecology and Evolution and sixteen credit hours in courses with an environmental studies focus and eight credit hours must be at the three hundred to four hundred level. These elective courses must be from at least three different disciplines.⁷

While currently St. Mary's only has an Environmental Minor we are working towards obtaining an Environmental Major. This is a very exciting step for St. Mary's because faculty have been trying to create an Environmental Major for many years. Just recently a proposal for the major was written and then submitted to the committee where it was reviewed and unanimously recommended by the curriculum committee, academic planning committee, and the faculty senate. The original proposal had to be revised before the full faculty finally approved it on April 7th 2015. Now the proposal just needs to be approved by the board as well as the state and St. Mary's will have its very own Environmental Major. According to an inside source the major is inclusive, rigorous, and capitalizes on what is best and unique about St. Mary's. Along with the creation of the new major we are in the process of hiring a new ENST professor. St. Mary's is on the brink of something great and we need to be able to truly commit ourselves to sustainability and make

⁷ Interview with Kate Chandler

these efforts worthwhile.⁸ See Appendix 2 for class listings from the past semester as well as the upcoming semester

In the paragraphs above I discussed the efforts and advances that St. Mary's has made over the years. While these advances have gotten St. Mary's to where we are today, there is a lot of room for growth. The promise of the upcoming Environmental Major is creating a lot of momentum in the Environmental Department. Now is the time to make changes, we should use this new energy and really push St. Mary's to be the best that it can be. I have pointed out a few ways in which St. Mary's could advance including incorporating sustainability within the curriculum as well as creating easy access to past research in order for future research. In the following section I will discuss a few universities whom have successfully incorporated sustainability into their curriculum. St. Mary's is in the perfect place regarding its recent growth to incorporate some of these initiatives and our campus and community would benefit greatly from doing so.

Case Studies:

At Emory University two professors Peggy Barlett, and Arri Eissen created a program that helped incorporate sustainability and environmental issued throughout the curriculum. This program, the Piedmont Project, occurs each summer and twenty professors from all departments are accepted into the program. The Piedmont Project allows faculty to design and develop new courses or new course modules during a two-day workshop. After the workshop the participants develop a syllabus for their new course or course module that integrates

⁸ Meeting with Barry Muchnick

sustainability. This program has been happening since 2001, and has been extremely successful. Over 184 faculty have participated over the years and the participants have been from varying departments. A few studies have been done in order to calculate the effectiveness of the project. In 2006 a study was done to reveal that most new/revamped classes were still being taught and as a result many faculty changed more than one course. In 2008 another survey was done in all departments except for Medicine that revealed 34 out of 43 Emory departments had at least one course that had a relation to sustainability. This project has made quite an impact at Emory University and continues to grow over the years.⁹

Another college that is leading the way in integrating sustainability is Santa Clara University. Santa Clara has created an integrative learning experience required of all undergraduate Students called the Pathway requirement. This requirement allows for an inter-disciplinary college experience ending with an essay where students comment on their experience through their Pathway. There are twenty-four different Pathways that students can choose from, sustainability being one of them. The Sustainability Pathway has about one hundred courses that students can choose from ranging from Religious Studies to Civil Engineering. This pathway allows students to learn about sustainability through multiple disciplines. Students are able to learn how to approach sustainability through different lenses, creating students who are well versed in sustainability. Currently there are 93 students at

⁹ <http://piedmont.emory.edu/About.html>

Santa Clara out of 2,049 who are in the Sustainability Pathway and there is an 89% pass rate compared to the 67% pass rate of the students in the other Pathway's.¹⁰

At the University of Penn State there is a program called Integrating Sustainability Across the Curriculum (ISAC). This program was created in 2012 in order to assist faculty to introduce sustainability into new and existing courses. The participants take part in a one-day workshop to investigate sustainability concepts. The faculty participants are paired with a paid undergraduate research assistant to help integrate sustainability into the syllabus, lectures, and readings over the summer. The research assistants work eight weeks throughout the summer for forty hours a week.¹¹

These universities provide insight on how to begin incorporating sustainability throughout the curriculum. St. Mary's College has the right atmosphere and support from faculty and students to incorporate some of the fore mentioned practices. We could easily create a workshop over the summer in which professors would be able to develop new courses and course modules that incorporate sustainability. Learning about sustainability through multiple disciplines allows students to view sustainability from different angles and truly become environmentally literate.

Project Overview:

¹⁰ <http://www.scu.edu/provost/ugst/core/pathways/available-pathways/sustainability.cfm>

<https://stars.aashe.org/institutions/santa-clara-university-ca/report/2014-05-03/IN/innovation/IN-1/>

¹¹ <http://www.upenn.edu/sustainability/get-involved/integrating-sustainability-across-curriculum>

Throughout this project I learned a lot about St. Mary's that I have never known before. This was one of the reasons why I wanted to research some of the history of sustainability and environmental efforts before focusing on what we can do in the future. Our past is what allows us our future, without this information we would not have anywhere to begin our journey. A lot of information is lost in the shuffle over the years and it was my intention to uncover some of this data in hopes of making it known publicly.

In order to begin my research of St. Mary's past I set up a meeting with Dr. Paul, part of the biology department. Dr. Paul was one of the contributing faculty members from the beginning and has access to a lot of this information. From Dr. Paul I learned about the 1992 PEW grant that funded the creation of environmental active learning classes. The faculty that were involved in this project created courses that had an environmental focus which then became some of the required courses for the Environmental Minor. I also spoke to Professor Johnson, who is part of the art department, because she was also a part of this group of faculty. She was a part of the Teaching and Learning group that was a result of this grant and whom still meet today. The PEW grant really got everyone in the St. Mary's community involved regardless of their department. It also made students more aware and involved. This information really started my timeline for the environmental movement at St. Mary's because this project really got things started. This was the first major turning point for sustainability.

My next step was to focus on the St. Mary's River Project because this project lasted for so long and the data collected is still providing the community with key

information. Once again I set up a meeting with Dr. Paul because he and Dr. Tanner were the ones who acquired the grant that began the SMRP. I felt as though this project was important to document because it involved faculty, students, as well as the community. This project started off as water quality data research in which the findings were given to the EPA. The results and findings of these projects have seem to be forgotten by our school. The SMRP provided essential data to the EPA as well as St. Mary's County and this should be documented. We need to be proud of the work that has been done in the past in order to build our future. Students and faculty spent so much time each semester and this deserves to be recognized. The project eventually ended in 2008 and morphed into a club. The SMRP club now focuses on teaching local fifth graders about the importance of the Chesapeake Bay, and it is still up and running.

Along with documenting the creation of the Environmental Minor and the research data of the SMRP it is also important that we record other advancements. As a result of not having an Environmental Major students resorted to creating their own Environmental Student Designed Major. In order to create your own major you must include at least three different disciplines in order to create a well-rounded major. This allows for SD Environmental Majors to quickly become environmentally literate in three different disciplines. The disciplines as well as the classes that students have chosen to take would provide insightful information for professors if they were interested in creating a course that had an environmental focus. This is why I am trying to work with Dr. Ruth Feingold, in order to gather this data and make it available to professors as well as students.

The actual transcripts are confidential, however it is possible to go through the transcripts of all the Environmental SDM's and see each discipline and course used. This would take an immense amount of time, however I believe it would be beneficial to professors in light of the upcoming changes.

Another useful source of data are student's St. Mary's Projects that have an environmental focus, as well as student's sustainability projects. These projects contain significant data and we should utilize them. As of now there is not a database for these projects, although as I said before they are working on creating a database. I met with Kent Randell the college archivist and he is working with the library to hopefully create a database for this data in the near future. Student's work so hard to produce these projects so why not use the data and research in order to better St. Mary's and our community.

St. Mary's has a lot happening that is worth documenting and displaying for our community to see. As I said before it is important to share our past projects as well as current projects in order to flourish. This is why we need to build off of the momentum of the Environmental Major and continue to strive for excellence. It has taken us so long to get to where we are today and in the next year we have the opportunity to advance greatly. This is why on the second part of my paper I focused on case studies, because St. Mary's has immense potential and we can take a cue from some of these other universities. In the upcoming year there are going to be a lot of changes and I am thrilled to be a part of them.

Outcomes:

This project produced a lot of possible different outcomes, most of which seem as though they will materialize over the following year, luckily I will be around and will hopefully see them progress. As I quickly found out there were a great deal of possibilities that could result out of this project and I was having a hard time focusing on just one idea because they are all so important. This is why I used this project to outline some actions we have taken over the years and then I proposed ideas on how we could improve in the upcoming years.

Some of the main points I have taken away from this project have been that in order to move forward we must do our history justice. That is we must publicize our successes. This includes creating a database in which we are able to access student's sustainability projects. It is essential to our growth as a community. Also in the works is having a workshop, much like the one at Emory University, in which professors would be able to create (or expand) a course that has a sustainability focus regardless of their discipline.

In preparation of the potential workshop I am creating a survey based off of Penn State's sustainability course assessment, for St. Mary professors to take. This survey will be for if they have a course which they think already has a sustainability focus or if they have an idea for a course that has a sustainability focus. Hopefully this survey can be sent around by the end of this semester so professors can start brain storming course ideas for next semester. These courses will allow students majoring in any discipline to recognize sustainability as an important aspect of

their lives. These possible classes will reveal the true place sustainability has in all disciplines. The survey that I have created can be found on [Appendix 3](#).

Conclusions/Recommendations:

This project has allowed me to talk with a group of people whom who would not expect to be a part of the environmental movement here at St. Mary's. This proves my point that sustainability is in fact cross-disciplinary and it belongs in all disciplines. I am not saying that each course at St. Mary's needs to solely focus on sustainability, however it should be discussed throughout the course. St. Mary's has such a unique and beautiful environment and we should recognize this and use what is around us in order to make a difference in the world.

St. Mary's has an opportunity to be a part of something much bigger than St. Mary's County, the world is changing and we have a chance to be a part of the sustainability movement. We have made great strides in the past and now it is time to exceed these efforts. We need to use the energy surrounding the new Environmental Major and truly push St. Mary's to be the best that it can be. It has taken us awhile to get where we are today, so let's not let this energy fizzle out. It's time to take action and I hope to be a part of this change.

In order for change to occur we need to look at some other universities whom have incorporated sustainability within their curriculum. Education is a key component in change and it is important that people recognize the importance of their individual actions and this awareness stems from education. So where else is better to start than a Public Honors College on the water? That's right nowhere.

Appendix 1:

Taken from search with Kent Randell from the archives website

These are the abstracts of the SMP's that we found:

Search term: Sustainability

[A Sojourner in Sustainable Life: approaching sustainability through literature and practice:](#)

What is 'sustainability'? In current American culture, this term is often tossed around lightly. Sustainability is talked about extensively in practically every major arena of daily life, from food to transportation to housing, but how well do we... 2012-12 Reisinger, Emma Gately

[Consumer's guide to opting out:](#) Out of the new, 'green' consumerism that mainstream society has embraced grows a false sense of mitigation. Industry has led the average American consumer to believe that individual environmental impact can be lessened simply by buying 'greener'... 2008-05 Epstein, Meredith Brooke

[Torturous tango : Argentina and the International Monetary Fund during the financial crisis of 2001:](#)

This paper critically examines the various sources and problems associated with Argentina's financial crisis of 2001. The three main topics that are covered are the fixed exchange rate, the global investment banking community, and the role of the... 2008-05 Morganstern, Jamie Jacob

[Proposal for full composting of Great Room food waste:](#) This research project is a feasibility study of the logistics required in order to implement a program for composting Great Room food waste at St. Marys College of Maryland. The project was intended to be a Joint-SMP; however it culminated in the... 2011-05 Blaik, Sarah Michelle

[Revising Our Social Contract to Save the World: Achieving Sustainability through Political Theory:](#)

As Daniel Quinn explains in his book Ishmael, the idea that we exist separately from the natural world and that it exists for our convenience is a central principle of civilization. This meme permits us to dominate and abuse the environment to... 2013-05 Lewis, Brian Michael

[Cooking and community : hope for the American food system:](#) The hope for the future of the American food system is in reclaiming cooking. Cooking allows us to pay attention to the ingredients we use, and to the people we share meals with. As consumers and eaters we have the choice to reject industrially... 2012-05 Sedon, Samantha Rose

[Harvest sustainability for the northern diamondback terrapin:](#) The Northern Diamondback Terrapin (*Malaclemys terrapin*) is the state reptile of the state of Maryland as well as the mascot for the University of Maryland. Making its home along the whole eastern seaboard, including the Chesapeake Bay, the Terrapin... 2006-05 Whilden, Joseph David

[Creating community and living intentionally : a study of secular intentional communities:](#)

A study of members/residents of three secular intentional communities was conducted to determine the demographic and personality traits of the individuals who choose to join intentional communities. 62 community members/residents completed a survey... 2009-05 Gibson, Joanna Louise

[St. Mary's College of Maryland carbon profile:](#) This [SMP] has been designed to produce a carbon profile for St. Mary's College of Maryland. The carbon profile presented here details the carbon dioxide, nitrous oxide, and methane emissions produced by the operation of the campus and the campus... 2008-05 Stillwell, Jeffrey Alan

[Study of Chesapeake Bay rehabilitation projects](#): This study looks at the Chesapeake Bay and the rehabilitation activities in and around the Bays watershed. After a brief history of the Bay and the human activities that have taken place around it, this study looks at the Bays water quality,...2009-05 Smith, Lauren Maureen

[Recycling at St. Mary's. "Save the Environment, Help the Economy. Reuse, Repurpose, Recycle"](#): Aside from an education, hard work, and talent the most important thing for mental growth is experience. With the help of my family and my Bolivian and Portuguese background I have been blessed with the opportunity to not only learn and live abroad... 2014-05 Mercado, Stephaniea

Search term: Environmental nature

[Seeds for growing green schools : an environmental education guide](#): Environmental education is an engaging and motivating style of teaching which can significantly improve student academic achievement and test scores, critical and creative thinking, attention, and behavior. However, environmental education plays a... 2009-05 Nelson, Katherine Elizabeth

[St. Mary's County almanac : a collection of seasonal nature essays](#): I feel compelled to confess, for the sake of my own integrity and that of the writing: I am a charlatan. I would prefer, though, to employ a term less incriminating. I am a "bridger." I come from western Maryland and have lived the majority of my...2004-05 Christianson, Dana Elizabeth

[Nature versus drugs : alternative treatments for attention deficit hyperactivity disorder](#): There has in the last half-century been a change from an agriculturally based culture to a culture focused on urban development and technological productivity. This has led to an environment of constant stimulation and high pressure to succeed.... 2009-05 Flanigan, Eileen Louise

[Seeking the back of beyond : Horace Sowers Kephart and romantic preservation in the Great Smokey Mountains](#): My analysis of the impact of nature on Horace Kephart reflects the ecological perspective of environmental history as I emphasize the relationship between one man and the natural world. I will discuss the background of a historical interpretation... 2004-12 Coons, Laura Brianne

[Environmental risks of genetically modified crops in comparison to conventional crops and farming practices](#): There are two main misconceptions regarding GM crops that this paper analyzes. The first is that genetic modification is the only technique that creates crosses not found in nature and that introduces novel genes into plants. The second... 2006-05 O'Hara, Kathleen

[Changing perspectives : an ecofeminist reading of Me llamo Rigoberta Mench y as me naci la conciencia](#): Ecofeminism in Latin America is a growing movement and philosophy that is useful as a tool for literary analysis as well as social change. An important goal of ecofeminist literary analysis is retrieving historical works that display both a... 2010-05 Brock, Christine Suzanne

[Environmental, economic, and social problems of globalization within the context of a sustainable future](#): A multi-pronged strategy involving governments, economists, environmentalists, civil society, indigenous groups, and ordinary people is needed to help move the world towards a sustainable future where human rights are recognized and the natural... 2004-05 Moore, Campbell Byron

[Philosophical challenges inherent in the nature versus nurture dichotomy : how is major depression affected by these complexities?](#): Without being able to separate the effects of "nature" from "nurture", it is impossible to clearly define depression properly. The ability of

both perspectives to explain a reasonable amount of cases and details of the disorder prove them as... 2004-05 Lee, Benaiah James

[Fungal biodegradation of plastics](#): Plastic is the general term referring to a group of polymers able to be molded for unlimited uses. As plastics became an integral part of modern society and our dependence on plastic grew, serious environmental problems arose from plastics... 2011-05 Grace, Gabriel Bernard

[Letting the wild in : poetry and prose of a biological nature](#): As a biology and English double major, Letting the Wild In: Poetry and Prose of a Biological Nature combines my love of the written word with my passion for environmental, behavioral, and evolutionary biology. It incorporates my experiences in the... 2009-05 Meyers, Camille Raquel

[Environmental risks of genetically modified crops in comparison to conventional crops and farming practices](#): There are two main misconceptions regarding GM crops that this paper analyzes. The first is that genetic modification is the only technique that creates crosses not found in nature and that introduces novel genes into plants. The second... 2006-05 O'Hara, Kathleen

[No child left inside : using children's literature and drawings to compare minority and white children's attitudes towards nature](#): Minority children in our school systems today continue to be underserved as evident in the achievement gap between minority and non-minority children (Howard, 2006). A lack of culturally relevant curricula designed for minority students affects... 2007-05 Fussell, Ashley Lauren Kerschner

[Herpetofauna of The Gambia, West Africa](#): Environmental education is a growing trend in The Gambia, West Africa, and the government is working on means to continue to encourage its programs. One major problem is that the government cannot protect species if their status is unknown. Over... 2001-05 Santoni, Christina Renee

[Digging up the dirt on environmental education : the development and implementation of the 'Dirt Alert' camp in children ages 6 to 9 at Jefferson Patterson Park](#): Environmental education (EE) and outdoor education are relatively new terms; however, the foundations for such programs have been building for over 200 years. Recent research has provided ample evidence about the benefits of these types of... 2011-12 Walter, Julie Rebecca

[Imperviousness and the Chesapeake Bay : an environmental and literary examination of urban sprawl](#): Imperviousness, which is defined as the sum of impermeable surfaces that make up the urban landscape, is an issue of environmental, political, and literary significance in Chesapeake Bay watershed. Impervious surfaces do not absorb precipitation... 2007-05 Perry, Kathleen Hayes

Search term: Chancellor's Point

[Chancellor's Point : a cultural landscape report](#): This cultural landscape report analyzes Chancellor's Point, a waterfront property on the St. Mary's River [Maryland] owned by Historic St. Mary's City. Using a collection of published and unpublished sources, as well as research studies regarding... 2011-05 Eaton, William Hamblen

Search term: "St. Mary's River" retrieves 44 results

Search term: Watershed retrieves 22 results

Search term: Calvert County [selected hits, 2 of 6]:

[Exploring my back yard : Calvert Marine Museum bay trek program](#): My plan is to develop an environmental-education curriculum that allows students to explore and learn about the Chesapeake Bay. This Chesapeake Bay program will be used as a Summer Youth Camp (grade 6-8). The first offering of the program will take... 2006-05 Simms, Tiffany Marie

[Status of the barn owl \(Tyto alba\) in St. Mary's County, Maryland](#): This project is a continuation of Melissa Boyle's St. Mary's Project on the Barn Owl in St. Mary's County, begun in the Fall of 1998. Boyle constructed and erected 16 owl nest boxes and searched marshes and duck blinds for owls. I monitored the... 2000-05 Painter, Kathleen R.

To view full abstracts:

<http://www.smcm.edu/archives> -> Digital Collections -> St. Mary's Projects

Appendix 2:

Courses offered this past semester were:

| | | | | | |
|---|--|-----------------|--|-------------------|--------------|
| 1 | Introduction to Visual Thinking - Art & Nature | MW 11:00-1:50pm | Johnson | | |
| | ART 233 | 3 | Nature Forms | TR 1:20 - 3:50pm | Scheer |
| | ART 308 | 1 | Nature Forms | TR 1:20 - 3:50pm | Scheer |
| | ANTH352 | 3 | GIS: Humans and their Environment | MW 6:00-7:50pm | Strickland |
| | BIOL316 | 1 | Tropical Biology | TR 10:00-11:50am | Tanner |
| | BIOL316 | | Tropical Biology Laboratory | W 1:20-4:10pm | Tanner/Price |
| | ENGL390 | | Topics in Literature: Landscape & Literature | MW 2:40-4:30pm | Chandler |
| | POSC311 | 1 | Public Policy | TR 2:00-3:50pm | Eberly |
| | BIOL101 | 1 | Contemporary Bioscience: Science and the Garden | MW 2:40-4:30pm | Gorton |
| | BIOL 101 | 1 | Contemporary Bioscience Lab | T 1:00-3:50PM | Gorton |
| | POSC408 | 1 | Studies in International Public Policy | TR 6:00-7:50pm | Cain |
| | ENST250 | 1 | Environmental Science | MWF 10:40-11:50am | Larsen |
| | ENST280 | 1 | Introduction to Environmental Studies | TR 8:00-9:50am | Muchnick |
| | ENST280 | 2 | Introduction to Environmental Studies | TR 10:00-11:50am | Muchnick |
| | ENST 450 | 1 | Seminar in Environmental Studies: Applied Sustainability Practicum | TR 2:00-3:50pm | Muchnick |
| | ECON354 | 1 | Natural Resource Economics | MWF 8:00-9:10am | Henderson |
| | ECON459 | 1 | Seminar in Economics: | MW 2:40-4:30pm | Henderson |

https://docs.google.com/a/smcm.edu/spreadsheets/d/1QI35O9wSTGPJ8_D8JiB-4Ub-Ormv9wM4kCfZso_vMoY/pub?output=html#

The courses for next semester are:

| | | | | | |
|----|----------|-------------------------|---|---|-----------|
| 43 | 1 | Biological Anthropology | MW 6 - 7:50pm | Samford | |
| | ANTH 302 | 1 | Food and Culture | MWF 10:40-11:50am | Ford |
| | ART 105 | 1 | Introduction to Visual Thinking: Landscape | T/R 9:20-11:50 | STAFF |
| | ART 369 | 1 | Art for Educators and Community Activists: Community Sustainable Design | MW 9:20-11:50pm | Patterson |
| | BIOL 311 | 1 | Biostatistics | MWF 9:20-10:40 and T 8:30-11:20 | Paul |
| | ECON 350 | 1 | Environmental Economics | TR 8:00-9:50am | Henderson |
| | ECON 372 | 1 | Economics of Developing Countries | TR 2:00--3:50 | Dowla |
| | ENGL 130 | 1 | Literary Topics: Reading Nature | MWF 10:40-11:50 | Chandler |
| | ENST 250 | 1 | Introduction to Environmental Science | TR 12:00-1:50pm | STAFF |
| | ENST 280 | 1 | Topics in ENST: Introduction to ENST | MW 2:40-4:30pm | Muchnick |
| | ENST 350 | 1 | Topics in ENST: Environmental Field Methods | MW 2:40-4:30pm | STAFF |
| | ENST 350 | 2 | Topics in ENST: Environmental Law, Science and Policy | TR 2:00-3:50pm | STAFF |
| | ENST 450 | 1 | Seminar in ENST: Community Sustainable Design | MW 9:20-11:50pm | Muchnick |
| | IDIS 380 | 1 | GIS Applications | Lecture MW 6-7:20 PM and lab Wednesdays 7:30-9 pm | Linn |

https://docs.google.com/a/smcm.edu/spreadsheets/d/1QI3509wSTGPJ8_D8JiB-4Ub-Qrmv9wM4kCfZso_vMoY/pub?output=html#

Appendix 3:

This is the survey that I have been working on to send out to professors in hopes of them brainstorming potential sustainability classes.

Course Assessment

Sustainability Course Evaluation

This survey is a sustainability course assessment, which will be used in the following ways:

- To establish which courses will satisfy the Environmental Studies Minor
- Provide students and faculty information about sustainability at St. Mary's College
- Provide faculty a chance to create courses involving sustainability

Part 1:

Personal Information

1. What is your last name?

2. What is your first name?

3. What is your St. Mary's e-mail

4. What academic department are you in?

Part 2:

Please answer the following questions for a sustainability course you currently teach **OR** wish to teach in the future:

-After filling out the survey for one course you may return to the beginning to enter another course

5. Course prefix and number (e.g., ENST 450)

6. Title of the course

7. How frequently is this course taught?

- Every semester
- Once every academic year
- Every two years
- Less than every two years

8. How often do YOU teach this course?

- Every Semester
- Once every academic year
- Every two years
- Less than every two years

9. What is the average class size?

- 10<
- 10>
- 30>

10. Is this course required by any degrees?

- Yes
- No

11. If so, what degree?

12. If this is a topics course are there plans to make it permanent/do you want to make it permanent?

- Yes
- Yes
- No
- Not applicable

Part 3:

Course Assessment

13. Is sustainability a primary focus in this class?

- Yes
- No

14. How much emphasis is placed upon sustainability in this course?

Environmental
Issues

Degree of Emphasis

Social Issues

Degree of Emphasis

Economic Issues

Degree of Emphasis

15. Briefly describe how your course incorporates sustainability or how you wish to incorporate it?

16. Active learning is an extremely important part of education, does your class use active learning (e.g., field trips/projects)?

Yes

No

If so, what types? If not is there room to implement active learning in the course?

*Created using Survey Monkey

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Meeting with Barry Muchnick
Meetings with Bob Paul
Meeting with Kate Chandler
Meeting/E-mail with Kent Randell
E-mail correspondence with Ruth Feingold
Information from the Climate Action Plan