

# General Education Council

2019-2020 Academic Year

## Agenda, for the meeting on Tuesday, March 24, 2020, via Zoom, 3:30 P.M.

1. Call to order
2. Review and approve the minutes of the previous council meeting – **See Attachment A**
3. Remarks by Co-Chairs – Dean James Mike, Dr. Kirk Moll
4. Old Business
  - a. Reports from our Standing Committees
    - i. Assessment (Dr. Debbie Gochenaur) – **See Attachment B**
    - ii. Budget (Dr. Carrie Sipes)
    - iii. Report from UCC (Dr. Scott Drzyzga)
    - iv. Program Committee (Dr. Sherri Bergsten) – **See Attachment C**
      1. New Course Proposal - ESS190: Coastal Hazards and Sustainability - GRN100  
(Program Goal N) – **See Attachments D, E**
    - v. Entry Year Experience (Dr. Steve Burg & Dr. Laurie Cella) - **See Attachment F, G**
  - b. Formation of By-Laws Revision Committee
5. New Business
  - a. Resolution to Suspend/Postpone Assessment Activities during the COVID-19 Crisis (see Assessment Committee minutes – **Attachment B**)
6. Announcements
7. Call to Adjourn

## MINUTES

General Education Council, 3:30 pm, February 25, 2020, ELL 205

- I. Dr. Moll called the meeting to order at 3:36 pm. Attendance at the meeting included: K. Moll, S. Bergsten, B. Culbertson, D. Girard, B. Ulrich, C. Sipes, S. Forlenza, C. Huo, M. Lucia, S. Drzyzga, A. May, R. Lesman, K. Shirk, S. Zheng, J. Mike, K. Lorenz, W. Kubasko, D. Gochenaur, S. Haase, J. Clements, J. Smith, and S. Burg.
- II. Dr. Drzyzga motioned, seconded by Dr. Ulrich, to approve the January 26, 2020 minutes. All were in favor of the revised minutes and the motion passed unanimously.
- III. Dr. Moll stated that the General Education Program proposal was approved at the College Council of the Arts and Sciences. Dr. Drzyzga will provide more information during the UCC Report.
- IV. Old Business:
  1. Assessment Committee –Dr. Gochenaur stated the CLA+ is at 88%. Reminder emails are going out. The committee is planning to move to Qualtrics by Fall 2020. The committee is developing a GEC Assessment folder and will determine where the folder will be housed. More information to come.
  2. Budget Committee – Dr. Sipes shared two (2) proposals. Dr. Sipes reminded the council these proposals will be the last two funded for the year. The Budget Committee recommended both grants for approval. 1) Dr. Senecal requested \$3,000 for Honors 102: History 105 to the travel and tickets to the Metropolitan Museum of Art. 2) Dr. Crochunis requested \$1,364 for travel to the National Museum of the American Indian and Holocaust Memorial Museum. All were in favor and the motion to approve both grants passed unanimously. Dr. Sipes and Dr. Moll shared information from discussions with the Provost regarding funding. Grant sources were recommended as well as leveraging the cost benefits for combining smaller group experiences into larger groups. Dr. Moll urged the council members to email Dr. Sipes with creative ideas for funding and organizing experiences. Discussion occurred around equity and ensuring high level participation for experiences.
  3. UCC Report – Dr. Drzyzga gave an update about the General Education Program Proposal which has reached approval at all three councils. Dr. Bergsten will provide more information in the Program Committee update.
  4. Program Committee – Dr. Bergsten
    - I. New Course Proposal – Introduction to Gerontology – GRN100 – Dr. Bergsten shared that the syllabus was modified to align goals and learning objectives. The Program Committee recommended approval for GRN100 proposal. The council voted, 18 approved, 2 abstained. The motion passed.
    - II. General Education Program Revision – Dr. Bergsten highlighted the proposed revision (Attachment G) and explained the changes related to the 190 courses. All were in favor of the and the motion passed unanimously. Note: You cannot have two or more 190 courses in the same department, same category and same semester.
  5. First-Year-Experience Committee – Dr. Burg shared the committee met in February around three major issues; grants and increasing on campus programs to

reach more FYE students, alternative lower cost team building events on campus, and measuring the effectiveness of the experiences in relation to the goals for FYE. The committee is also considering how to gather feedback from students and involve them in the process of planning experiences. Dr. Burg shared that the administration is communicating commitment to the UNIV101 with caps staying at 20. Courses will be enrolled at 22 to mitigate the summer melt – landing at 20 by Fall. Dr. Burg shared the General Education Policy for Transfer Students and suggested two revisions; 1) lower the transfer credits from 45 to 30 2) If a transfer student has between 30-45 credits and a grade point average less than a 2.0, UNIV101 will be required. Dr. Burg shared that he, Dr. Cella, and Javita Thompson presented at the National First Year Experience conference. Dr. Moll congratulated Dr. Burg and asked that he pass the accolades onto his fellow presenters.

- V. Formation of By-Laws Revision Committee – Dr. Moll shared that Dr. Forlenza, Dr. Shirk, Dr. Wentz, Dr. Kubasko and Dr. Greenberg have agreed to join the committee. He thanked those members who signed up and asked if there were any other members interested.
- VI. New Business – Dr. Moll opened the floor for discussion concerning the potential impact of financial sustainability plan on the General Education Program. Committee members expressed concerns about equity for student support, large class sizes, meeting student needs, engaging students in specific disciplines, measuring outcomes of the general education courses, considering a proactive approach to sharing our general education program and interactive online environments. Lack of resources were identified as a barrier to shifting to more online instruction related to support staff for D2L and access to more tools within Zoom. Questions emerged about the Shippensburg brand and how to highlight what makes Shippensburg unique. Recommendation was made that a committee be formed to explore potential online learning options and other institutions.
- VII. Announcements - There were no announcements.
- VIII. The meeting adjourned at 4:59 pm.

Minutes submitted by Dr. Wendy Kubasko

# Attachment B

## GEC Assessment Committee minutes

20 March, 2020

Present: Sherri Bergsten, Sam Forlenza, Debbie Gochenaur, Steve Haase, Rob Lesman

The committee met via Zoom to discuss issues related to the off-campus move/conversion to online delivery as a result of the COVID-19 pandemic.

The committee discussed various issues including: potential difficulties in departments being able to submit Fall, 2019 data as originally planned such as difficulties/issues in collecting new assessment data this semester, difficulties in being able to meet with departments to discuss assessment data, and review goals, etc.

After discussion, the committee unanimously recommends to the GEC that we:

- 1) suspend assessment for the Spring, 2020 semester
- 2) postpone reporting of Fall, 2019 data until a September, 30, 2020 deadline
- 3) postpone departmental General Education course assessment meetings until Fall semester

Respectfully submitted,

Steve Haase

# Attachment C

GEC Program Committee  
February 18, 2020  
OM 203A, 3:30 p.m.

Attending: Kate Shirk, Brian Ulrich, Sherri Bergsten, Margaret Lucia, Michael Greenberg, Brian Wentz, Kirk Moll

SHIRK motion to approve the minutes of 2/4/20, and ULRICH seconded. The motion passed with four in favor and one abstention.

The committee reviewed the revised 19-168, Introduction to Gerontology, discussing the degree to which the GEC learning objectives for Critical Reasoning were fully integrated within the course. SHIRK motioned to recommend the course for approval, and LUCIA seconded. The motion passed with three ayes and two abstentions.

Amidst the discussion Introduction to Gerontology, there was also a more general discussion of the degree to which the Critical Reasoning program goal was very broad, and how much courses seeking to become part of general education should deal explicitly with program goal objectives. There was also discussion of proposing at GEC a moratorium on Critical Reasoning pending a revision of the category, though, as well as whether such a revision needed to be left to the four year program review or whether it was fair to single out a certain category that way. Another issue that came up with the use of seat allocation as a means of addressing the underlying problem, and therefore the need to push forward the opening of the by-laws at the next GEC meeting. There was a clear sense that these issues needed to be a part of a broader conversation that was ongoing and involving the whole GEC.

The committee noted SPN 152 and SPN 153 proposals for distance education as information items.

The meeting adjourned.

SHIPPENSBURG UNIVERSITY OF PENNSYLVANIA  
 UNIVERSITY CURRICULUM COMMITTEE  
 NEW GENERAL EDUCATION COURSE PROPOSAL

At Shippensburg University, we want our students to:  
 develop solid **FOUNDATIONS**  
 recognize **INTERCONNECTIONS**  
 consider the importance of **CITIZENSHIP & RESPONSIBILITY**  
 understand the **NATURAL WORLD & TECHNOLOGIES** that surround them  
 and to appreciate **CREATIVITY & EXPRESSION**.

Please be sure to read the General Education Mission, Goals, Objectives, and Assessment document posted on the General Education Council (GEC) or University Curriculum Committee (UCC) websites prior to filling out this proposal. New General Education Courses should meet the requirements listed below:

- General Education courses must support one of the General Education Program Goals.
- General Education courses must provide students with ample opportunities to develop their competencies associated with the student learning objectives associated with the selected goal.
- All sections of the same General Education course should support the same program goal and student learning objectives, and work toward developing the same levels of competency.
- The sponsoring department or academic program must agree to foster assessment of student learning outcomes and to help the GEC to periodically assess the General Education Program.
- Academic programs should be aware of PASSHE's (2016) directed general education policy and its effect on courses that are cross-listed in both the General Education Program and a major program. **The default is to count course credits as general education. If the course should count in the major, then a program revision will need to be submitted.** Minor and certificate programs are not affected by this policy.

STUDENT LEARNING OBJECTIVES, OUTCOMES, AND ASSESSMENTS OF COMPETENCY FOR THE COURSE:

- A. A **student learning objective** is a clear statement of what we expect a successful learner to know, understand, or be able to do at the end of a period of learning.
- B. A **student learning outcome** is the result of a learning process; an actual outcome (e.g., an answer given, an essay written, an argument made, a skill demonstrated, etc.) that indicates what a learner knows, understands, or can do.
- C. A **competency** is a descriptor that describes how well a student knows, understands, or can do something (e.g., Unsatisfactory, Emerging, Developing, Proficient, or Mastery); a level of competency better than unsatisfactory is usually required to pass.
- D. Departments or academic programs offering General Education courses must address the student learning objectives associated with each selected General Education Program Goal and may include additional student learning objectives associated with the subject, special topic, or discipline.
  1. List the student learning outcomes for the course by completing the sentence,  
*“Upon successful completion of this course, the student will be able to...”*
  2. List your methods for assessing student learning outcomes and competencies.

DATE: 2/26/2020

ACADEMIC PROGRAM/DEPARTMENT: GeoESS

COLLEGE: Arts & Sciences

SPONSOR: Sean Cornell

PHONE/E-MAIL: x1310

COURSE TITLE: ESS 190: Selected Topics- Coastal Hazards and Sustainability

EXISTING COURSE NUMBER:

OR

PROPOSED COURSE NUMBER: 190 [recommended process for new course (not currently in course catalogue)]

WHICH GENERAL EDUCATION PROGRAM GOAL ARE YOU PROPOSING TO SUPPORT?

To prompt and guide students to ... understand the scientific method and resulting principles and theories, critically evaluating data to answer questions about the natural world.

OFFERED AS:  Distance Education only  Standard course  Both

GRADE TYPE:  Standard grading system  Pass/Fail

CREDIT HOURS: 3.0

WORK LOAD EQUIVALENCY: 3/12

CREDITS COUNT TOWARD DEGREE:  Yes  No

FINAL EXAM/ASSIGNMENT:  Yes  No

This is not intended to be a directed general education course, but students in Geo/ESS majors could apply this to their "elective" credits (as field station courses do count for electives) if they didn't apply it to their general education courses

Final Research Project...

CATALOG COURSE DESCRIPTION:

Provides a global perspective of the geology and geography of coastal landscapes, the processes responsible for their formation, diversity, and change over time. Content includes a review of human impacts and responses (i.e. engineering, mitigation, adaptation, emergency response, land use planning, etc.) to coastal hazards affecting millions of people living in coastal zones. Historic and late-breaking case studies will be integrated, especially studies of the Eastern U.S. Students will collect and analyze real data to apply critical thinking and problem-solving skills to real-world issues affecting human populations today and in the future. Students will consider options to improve resiliency and sustainability in these dynamic environments.

PRE/CO-REQUISITES:

None

General Education Mission and Goals, Student Learning Objectives, Assessment of Student Learning Outcomes & Competencies, and Resource Implications See attached for supplement for answers to these questions

1. How will this course support the mission, and selected theme and goal, of our General Education Program?
2. Does this course duplicate any existing courses? Why is this course needed in addition to the other General Education courses that already support the same Program Goal? Provide justification.
3. How will this course provide students with ample opportunities to accomplish the learning objectives listed on the GEC's rubric for the selected Program Goal? [Examples of opportunities include things such as course readings, discussions, essays, reflections, projects, homework assignments, exam questions.]
4. If applicable, how will this course provide students with ample opportunities to accomplish the additional learning objectives associated with the subject, special topic or discipline? [Examples of opportunities include things such as course readings, discussions, essays, reflections, projects, homework assignments, exam questions.]
5. How will student learning outcomes and competencies be assessed? Please share any assessment data relevant to the General Education goal. [Examples of assessable opportunities include things such as essays, reflections, projects, homework assignments, exam questions.]
6. Include a **syllabus** with a tentative schedule of topics and assignments, and selected textbooks or readings. Indicate the syllabus page number(s) where General Education learning objectives and assessments are shown. This syllabus is not binding, but it should show specific examples of how the course may achieve the learning outcomes associated with the proposed General Education program goal.
7. What is the estimated offering capacity of the course?
  - a. How many sections and seats will be offered initially?
    - i. How will the addition of this course affect the current teaching loads, enrollments, and curricular offerings of your department?
    - ii. What resource impact(s) will this course have on students, other courses, or other departments? Provide details.
  - b. What are the projected offerings over the next four years?
    - i. If you project growth over the initial number of offerings, then what are the expected impacts of that growth on students, other sections, other courses, or departments (including yours)?
  - c. Can this course be taught by several members of the faculty in the department, or is it restricted to a specialist in the field? Indicate likely instructors. (If a specialist is needed to teach this course, please provide the rationale.)
  - d. What additional costs are anticipated over the next calendar year by instituting this course? (Faculty, supplies, equipment, facilities, e.g.: classroom space, laboratory space, or support personnel.)
8. Please address possible impacts on existing courses in the General Education program goal and theme. Verify consultation with the other departments teaching courses in the same program goal.
9. Will this course require any computing resources above and beyond those typically available in the classroom?
10. What additional library resources will be required? Has the library been consulted to determine the adequacy of library holdings or to estimate the cost to improve these sufficiently?



SELECTED REFERENCES:

**Note: UCC will not act on proposals until the minutes of all appropriate councils documenting approval have been received. If suggestions or recommendations have been made at the council level, then a revised proposal must be provided to UCC. If revisions are recommended by UCC, then a final copy must be provided to the UCC Chair and Secretary before the proposal will be presented to the Forum.**

## General Education Program Proposal Addendum Materials

### For ESS 190: Selected Topics – Coastal Hazards and Sustainability

**Course background:** The course was designed through a peer-reviewed NSF InTeGrate project via the Science Education Resource Center (SERC) as a collaboration between Penn State, University of New Orleans, and Shippensburg University. Assessment results of our implementation at Shippensburg University (Fall 2014; using a flipped-classroom model) was more effective in helping students achieve SLO's relative to schools who delivered the course entirely online. Students completed lectures/readings online and came to class for support with hands-on lab activities. In summer 2018, this course was offered as a 3 week Cat "C" / "N" general education course through the Chincoteague Bay Field Station and followed the same flipped-classroom model, although field-based components were amplified significantly over the face-to-face classroom-based labs. Feedback from students showed a higher level of engagement and a demonstrable higher level of understanding with regard to the major concepts of the course and a significantly higher performance on the course capstone activity – i.e. a Coastal Vulnerability Audit.

We seek to offer this course following a hybrid/blended model, as noted in the syllabus. It is still considered a standard face-to-face course, but it delivers content online as well. In Summer 2020, we propose that students will complete online module work in 2 weeks prior to the hands-on field based component which will last an additional week. This is proposed to reduce cost for students staying at the field station (from 3 weeks to 1 week), to allow students who work summer jobs to have the opportunity to take a field course without jeopardizing their work schedule, and to provide Exploratory Studies students who are still looking for a major, with exposure to the inter-disciplinary nature of Geographic and Earth Sciences at the general education level. This model is thus innovative in that it replaces the broad survey-style general education science course with a narrowly-focused issue-specific science course that still delivers on the SLO's of the Department, the University, as well as the general education program.

Below are the responses to the questions listed on the GE Course Proposal form.

1. How will this course support the mission, and selected theme and goal, of our General Education Program?

This course was designed to satisfy the requirements of our former general education program. However also has been adapted to meet the goals of the "N" or natural world in the NEW general education program. The new goals are integrated into the 2020 syllabus as attached.

The very design of the course is to engage students directly and actively in the process of science. Rather than simply repeating and regurgitating lessons learned by other scientists, students will learn about coastal sciences through a number of global case studies relative to the topics at hand (in similar fashion to traditional textbooks), but they will also utilize pertinent data that are accessed through online databases (NOAA, PSMSL, USGS, NASA, etc.), together with data they collect themselves to answer problem sets as part of the formative assessments

for the course. In addition, they will use the methods of science as scientists do, by completing a capstone activity that integrates across the modules of the course. In the summative assessment, students will gather their own data (empirically in the field), they will have ample opportunities to observe natural processes first hand, and they will integrate and analyze these data to produce their own models to explain (as part of their capstone) how one community (i.e. Chincoteague) is impacted by climate change, sea-level rise, biological engineering, environmental degradation, storm processes, coastal engineering impacts, etc. and they will generate potential solutions to reduce the vulnerability and recommendations to increase resiliency for this mid-Atlantic community.

2. Does this course duplicate any existing courses? Why is this course needed in addition to the other General Education courses that already support the same Program Goal? Provide justification.

No

We propose this model for several reasons, but the primary is that it provides for innovation and allows for a more engaging learning experience IN A FIELD-BASED setting. It will especially provide opportunities for non-majors and Exploratory Studies students who are still looking for a major. This model is innovative in that it replaces the survey-style general education science course which can be intimidating to students who say they “don’t do science”. From anecdotal evidence, this course in 2018, helped break down the fear students had for this type of course.

3. General Education Learning Objectives: How will this course provide students with ample opportunities throughout the course to accomplish the learning objectives listed on the GEC’s rubric for the selected Program Goal?

Given the three SLO’s that are highlighted in the Natural World Curriculum Rubric, this course will be an ideal course where students will be guided and prompted “to understand the scientific method and resulting principles and theories by critically evaluating data to answer questions about the natural world”. The specific SLO’s are included in the table below. The table highlights how each will be assessed within the context of the 4 modules of the course.

N-World SLO’s	Assessment Embedded In:
The student understands how the scientific method involves experimentation or empirical observations that are used for the development, testing, and application of models, theories, or laws.	Module 1: Introduction to Geography & Geology of the Coastal Zone  Course Capstone Project
The student demonstrates a broad understanding of scientific principles and theories specific to the discipline, and can explain their origins.	Module 2: Long and Short-Term Processes of Change and Their Impacts on Society  Course Capstone Project
The student critically evaluates scientific information and/or solves problems using scientific data.	Module 3: Coastal Engineering and Society Response to Coastal Hazards & Module 4: Society and Policy Making Course Capstone Project

4. Discipline Specific Learning Objectives: If applicable, how will this course provide students with ample opportunities to accomplish any additional discipline specific learning objectives?

The department's learning goals are included on the syllabus. Many of these are intimately related to the general education goals. Students have to demonstrate proficiency in reading/interpreting texts appropriate to the discipline, communicating effectively in multiple forms, using the scientific method, using the tools/methods of our discipline, etc. The very nature of the course allows for both the GE and department-specific goals to be realized.

5. How will student learning outcomes and competencies be assessed using the approved rubrics for reporting to the GEC Assessment Committee? Please share any assessment data relevant to the General Education goal.

A detailed grading system is included in the syllabus. Assessment will be embedded in rubrics in D2L where student work will be submitted, and both formative and summative assessments will be scored and submitted according to the GEC assessment plan. Also see #3 above.

6. Include a syllabus with a tentative schedule of topics and assignments, and selected textbooks or readings. Be explicit regarding when and how the General Education learning objectives are addressed through the content and assignments in the syllabus. This syllabus is not binding, but it should show specific examples of how the course may achieve the learning outcomes associated with the proposed General Education program goal.

See attached.

7. What is the estimated offering capacity of the course?
  - a. How many sections and seats will be offered initially?  
1 section= up to 14 students (limit is van capacity for transportation)
  - b. What are the projected offerings over the next four years?  
Every other summer – unless interest grows.
  - c. Can this course be taught by several members of the faculty in the department, or is it restricted to a specialist in the field? Indicate likely instructors. (If a specialist is needed to teach this course, please provide the rationale.)  
The course could be taught by multiple faculty, but the specialist for this course is Dr. Cornell. Dr. Zume also teaches at the field station, and others are able to do so. This course could easily be taught by many others.
  - d. What additional costs are anticipated over the next calendar year by instituting this course? (Faculty, supplies, equipment, facilities, e.g.: classroom space, laboratory space, or support personnel.)  
Field vehicle is required for the field course. Everything else is already in hand, both at the field station (field gear) and the university.
8. Please address possible impacts on existing courses in the General Education program goal and theme. Verify consultation with the other departments teaching courses in the same program goal.

The small number of students in this course will not impact other courses. We hope, that it will, in fact, attract more students to related courses and associated majors.

9. Will this course require any computing resources above and beyond those typically available in the classroom?

Computer labs are available at the field station already. Students can either use on campus labs here at Ship, or supply their own. Software to be used is commonly available software.

10. What additional library resources will be required? Has the library been consulted to determine the adequacy of library holdings or to estimate the cost to improve these sufficiently?

- a. No additional library resources required. Students will likely use the indexes/databases to download articles for use in their projects and to supplement their course-assigned readings, but MOST materials are provided already via the course website as noted in the syllabus.



## ESS 190 Selected Topics: Coastal Hazards & Sustainability Syllabus Summer 2020

**Instructor:** Dr. Sean Cornell

Email: [srcornell@ship.edu](mailto:srcornell@ship.edu)

Cell Phone: 315-854-0236

### **Course Description:**

Provides a global perspective of the geology and geography of coastal landscapes, the processes responsible for their formation, diversity, and change over time. Content includes a review of human impacts and responses (i.e. engineering, mitigation, adaptation, emergency response, land use planning, etc.) to coastal hazards affecting millions of people living in coastal zones. Historic and late-breaking case studies will be integrated, especially studies of the Eastern U.S. Students will collect and analyze real data to apply critical thinking and problem-solving skills to real-world issues affecting human populations today and in the future. Students will consider options to improve resiliency and sustainability in these dynamic environments.

### **REVISED Course Schedule, Location, and Logistics FOR 2020:**

- This course will meet **online** via [www.d21.ship.edu](http://www.d21.ship.edu) from **June 5 to June 20** and **face-to-face** from **June 21 to June 27 *at the Chincoteague Bay Field Station*** in Wallops Island, Virginia. Students should plan to arrive at the field station on Sunday June 21 Prior to 3:00 p.m. for check-in, orientation, and class.
- Students will need to ***provide their own transportation*** to the field station (or work with the instructor to arrange transportation from Shippensburg University ahead of time).
- Students should be prepared for approximately 20 hours of instructional time in online lectures, discussions, and lab activities during the online component (first 2 weeks) of the course, and for 5.5 days of lab and field-based instructional time in and around the Eastern Shore of VA and MD through the face-to-face week of the course.
- Students should expect to allocate at least 2 hours of independent time (for each hour of instruction) on course-related objectives (reading, completing online activities, formative/summative assessment activities, etc.).
- Hands-on ***field and laboratory experiences will be central components of the course***. Some lectures and guest speakers will be included. These will take place in the lab, others will take place in the field, or at other off-site locations. Students should expect ~60% of class time to be in field in the face-to-face week.
- Depending on travel time (via boats, canoes, vans, etc.), students ***should expect to dedicate 8 hours per day*** to class. Students will need to dedicate additional time outside of class to complete readings, complete assignments, and other work in the lab and on projects as necessary.
- As with all courses at the field station, ***students may only enroll in one class*** during each 3-week term.
- A detailed course itinerary with daily activities and assignments will be provided at the outset. It is developed in coordination with staff at the Chincoteague Bay Field Station and other programs.
- Students are advised that the instructor and the staff are dedicated to ensuring the course objectives are met in a safe and effective manner. As such, the ***course itinerary may have to change due to unforeseen circumstances (i.e weather, equipment/boat/transportation issues, launch activities at NASA, etc.)*** that are beyond the control of the instructor, the university, the Chincoteague Bay Field Station, or its partners. We request that students ***be flexible and accommodating*** in the event that schedule modifications arise.

### **Mission & Goals of Category C General Education Courses (STUDENTS ENTERING SHIP BEFORE Fall 2018).**

“Basic scientific literacy is necessary for knowledge of ourselves as a species and of the universe in which we live. The courses in this category have two comprehensive objectives: a) to make clear what kinds of problems in the physical world are susceptible to scientific investigation and what kinds of solutions such investigation can produce; and b) to provide an appreciation of the practice of scientific research and methodology, with its interaction of experiment and hypothesis.”

Given the requirements above, students in this course will learn concepts and principles of modern geological science. Students will develop an understanding of geologic vocabulary, knowledge of Earth processes, and hone their observational, descriptive, and interpersonal (written and spoken) communication skills, so that they are able to communicate about the natural world around them. As this is **a science class**, students will use scientific methods and develop skills to collect relevant qualitative and quantitative data, analyze that data, and think logically and critically about the data and its implications for the world around them.

### **Specific General Education Goals**

1. Understand the role of scientific models, theories or laws as abstract representations of natural processes;
2. Understand how experimentation or empirical observations are used for the development, testing and application of these models, theories, or laws;
3. Learn about measurement and data analysis which are both necessary to quantify the outcome of experiments and observations;
4. Learn about the influence of science on everyday life;
5. Develop abilities to critically read and evaluate scientific results and reports;

**Mission & Goals of Category N General Education Courses (NEW STUDENTS SINCE FALL 2018).**

To understand the scientific method and resulting principles and theories, critically evaluating data to answer questions about the natural world **at Proficient and Mastery Levels;**

1. Students will understand how the scientific method involves experimentation or empirical observations that are used for the development, testing and application of models, theories, and laws
2. Students will demonstrate a broad understanding of scientific principles and theories specific to the discipline (Geology, Coastal Science, Environmental Sustainability) and can explain their origins.
3. Students will critically evaluate scientific information and solve problems using scientific data.

**Student Learning Outcomes Pertinent to the Department of Geography-Earth Science's Program Goals**

**At the end of this course, students will be able to demonstrate:**

1. proficiency in reading, and interpreting basic geologic, and oceanographic texts relative to the coastal ocean, its materials and processes including surface processes (i.e. tides, currents, storms and coastal flooding, erosion, etc.), and natural hazards that arise in association with societies and individuals that live, work, trade, and recreate in these coastal natural environments;
2. proficiency in observation, description, and communication (graphically, verbally and in writing) about the coastal zone, its materials and non-living and living resources (sediments, ground water, salt water, biologic communities, etc.), and their sustainability using appropriate terminology;
3. proficiency in the use of scientific methods (i.e. hypotheses testing, modeling, consilience, etc.) and geologic principles to assess geologic events/processes (i.e. hurricanes, nor'easters, sea-level rise, etc.) and engineering strategies employed to protect shorelines from these processes;
4. proficiency in the use of geotechnology (maps, compasses, apps, databases, etc.), and geologic laws to collect, analyze, and interpret geologic data from the literature, or directly from laboratory and field settings;
5. knowledge of geologic/geographic/engineering concepts to evaluate how the coastal zone and its processes function and impact life including the lives of humans, and likewise how humans are impacting the coastal zone and its diverse environments both positively and negatively;
6. how sustainability of society depends on stewardship choices to reduce our reliance on nonrenewable resources by development of renewable solutions that make it possible for all people to be adequately sustained on this planet.

**Course Content & Student Learning Outcomes:** This course is a general education science with lab course. This course has 4 sections/units with specific modules that will be explored through readings, lectures, lab, and field-based activities. These include:

1. Introduction to the Geography & Geology of the Coastal Zone, wherein students will:
  - a. discuss and analyze the geology and geography of coastal landforms globally and in the Mid-Atlantic, and
  - b. evaluate the processes that interact to produce these dynamic landscapes over various time scales;
2. Long and Short-term Process of Change and Their Impacts on Society, wherein students will:
  - a. explore how humans and human landscapes in coastal settings are impacted by natural processes,
  - b. observe, quantify, and analyze tides, storms, and longer-term sea-level change records,
  - c. use these data to develop models to forecast how such processes are likely to impact our coastlines in the future,
  - d. evaluate the impact of sea-level change on coastal communities;
3. Coastal Engineering and Society Response to Coastal Hazards, wherein students will:
  - a. investigate coastal defense strategies employed around the world (and locally in the Mid-Atlantic) to protect our shorelines from marine threats, storms, sea-level rise, climate change, and other risks.
  - b. detail the mechanics of coastal erosion, measure shoreline erosion rates, and assess standard coastal engineering practices for shoreline stabilization, erosion reduction and mitigation using both "hard" structure and "soft" engineering approaches as well as layered defenses, and
  - c. address risk and hazard vulnerability and consider the concept of managed retreat and smart building and other approaches to mitigation and flood protection through case studies;
4. Society and Policy Making, wherein we will:
  - a. integrate the physical processes of coastal systems and emerging strategies for coastal management in order to inform the development of policies that address contemporary issues related to improving the resiliency and reducing the risk of living and working in the coastal zone ,
  - b. explore and evaluate the concept of vulnerability to prioritize protection of coastal people, places, and property
  - c. engage the disaster management cycle to better inform decisions about preparing for and responding to short-term coastal hazards such as tsunami and storm surges
  - d. consider techniques such as stakeholder analysis, cost benefit analysis, and adaptation pathways so that they might be used to plan for long-term changes to coastal vulnerability, especially as caused by sea-level rise.

Ultimately the content of this course will ask students to better understand the science of the coastal zone and will help them understand the dimensions necessary to find inter-disciplinary solutions to reduce the economic, social, and cultural vulnerabilities of these dynamic regions to societies around the world and in the Mid-Atlantic.

To assist students reach the learning objectives, I will make use of Desire2Learn and the course website (<https://www.education.psu.edu/earth107/>) where all course materials and learning support materials are available. The course materials are developed collaboratively with faculty from several universities who specialize in the topics of the course and three universities will be teaching the course simultaneously to evaluate the course materials and learning gains. All course assignments, quizzes, midterms, labs, and discussion boards will be administered and submitted through the D2L system, unless otherwise instructed.

**Text Book & Materials:** There is no required textbook for the course. All course content will be made available through the course website and [www.d2l.ship.edu](http://www.d2l.ship.edu) and through the course website links provided. Students should have a web-connected laptop for both in class and out-of-class work. Students will be required to work with several software programs (most are freeware or standard software) which include GeoMapApp, Google Earth, and the Microsoft Office suite (Microsoft Word, Excel, PowerPoint, One Note, etc.). Please consult with the instructor if you have challenges with hardware or software. Most software can be downloaded from the web, according to instructions provided on the course “orientation” website. You can also use computers in the computer lab at the field station.

**Grading:** Your grade is based only on the points you earn. I do not grade on a “bell curve.” Your final class grade is calculated per the breakdown below. When final grades are calculated, if your final grade is very close to a grade cutoff (i.e. less than 1.0 %), it is my prerogative to elevate a student’s grade to the next highest letter grade if that student’s participation and assignments were consistently above average and attendance was good. If your final letter grade is just below a grade cutoff, don’t come asking for a bump in grade.... you will already have received the bump if you earned it.

Module. Quizzes	= 20 %
Module Assignments:	= 40 %
Lab/Field Notebook	= 10 %
Course Participation and Discussion	= 10 %
Course Capstone: Coastal Vulnerability Audit:	= 20 %

Total: 100 pts

*Note – I will drop the lowest score for the weekly quizzes and weekly blogs.*

**Grade Distribution:** A: >95 %, A-: 91-94.99 %, B+: 87-90.99 %, B: 83-86.99 %, B-: 80-82.99 %, C+: 76-79.99 %, C: 70-75.99 %, D: 60-69.99 %, F <60%

**Attendance:** It is a fact that students who miss class and do not keep up on assignments do poorly regardless of aptitude. Therefore it is in your best interest to be in class and stay up-to-date on all course work. It is the policy of the Department of Geography & Earth Science that students attend all class days. If you miss a class you must provide documentation of the absence, obtain all notes from a class mate, and turn in any assignments due by the assignment deadline.

**Quizzes (D2L):** Students are expected to be prepared for working on course materials having read the assigned materials. To ensure this happens students will take a quiz through the Desire2Learn website for the course.

**Assignments & Deadlines:** Students will be expected to hand in assignments ON TIME! Assignments need to be submitted via the course dropbox on D2L. Late assignments will be penalized 25% per day, and cannot be submitted after the assignment is graded and returned to the rest of the class. Deadlines for each assignment are not flexible, unless prior arrangements have been made and approved by the instructor– no exceptions!

**ASSIGNMENTS:** We will complete assignments for each module of the course. These assignments will be hands-on, data-rich and focused on developing observational and critical thinking skills, using a variety of geotechnology. Each assignment MUST be submitted on D2L unless otherwise noted. **These will be due by 9:00 p.m. on the deadline dates unless otherwise noted.**

**FIELD/LAB NOTEBOOK:** Each student will be required to complete a daily entry into their field/lab notebook. Not only should it include detailed description of course notes and field trip sites, but it should also include data collected and other pertinent information. It is critical that each of you spend time reflecting on what you are learning in each module and apply concepts from the course to case studies and your personal experiences.

**FIELD/BOAT TRIPS:**

These are required and important components of the course. Students will be required to participate in all field trips and will be required to have appropriate gear and their field notebook (put it in a Ziploc bag to keep it dry). This includes bug spray, sun block, hat, appropriate footwear (closed toed shoes for all boat trips- MANDATORY), water bottles, day pack, etc. Do NOT miss these trips.

**Additional Information:**

- 1.) For your privacy, I will not discuss your grades over the telephone or via E-mail (with you or any other person), so please do not ask! If you have a question about your grade, I expect that you will make arrangements to visit me during office hours or at another pre-arranged time.
- 2.) Academic integrity is tantamount to the pursuit of scholarly activity in an open, honest, and responsible manner. All members of this class are expected to act with personal integrity, and MUST respect the dignity of other students and this includes their intellectual rights and intellectual property as well as the intellectual rights of other people. **All students should work to create**



**and maintain an environment that is based on mutual respect so that all students can succeed through their own hard work and efforts.** Thus your work, in all aspects of this course, should be your own and adhere to the Universities policies on academic honesty. Plagiarism detection software will be employed on submitted assignments to ensure students are employing academic integrity. Should it be suspected that an assignment is not one's own, it will be handled according to procedures outlined in the undergraduate catalog (found online at [www.ship.edu/catalog/ug/](http://www.ship.edu/catalog/ug/)). *This may include, but is not limited to: receiving a zero grade for the assignment, failure of the course, and/or other sanctions assigned by the university.*

## Tentative Course Schedule

Subject to Change at Instructor's Discretion and Based on Weather or Other Unforeseen Circumstances:

Week 1	Section 1: Introduction to the Coastal Zone: Society, Landforms, and Processes		
<b>Fri - Sun 6/3 to 6/5</b>	Online Course Orientation Activities Get up and running	Google Earth Introductory Tutorials (Learn how to really use it!) Course Materials: Watch syllabus video, find everything, how to access it, what tools (hardware & software) do you need? Prepare your e-Introductions and post on D2L – Discussion Board <ul style="list-style-type: none"> <li>• Read Module 1 for Monday</li> <li>• <a href="https://www.e-education.psu.edu/earth107/node/3">https://www.e-education.psu.edu/earth107/node/3</a></li> </ul>	
<b>Mon, 6/8</b>	<b>Module 1: The Societies and Economics of Coastal Regions</b>	Online Lecture Complete Module 1 Assignments: <ul style="list-style-type: none"> <li>• Read Module 2 and associated readings for tomorrow</li> <li>• <a href="https://www.e-education.psu.edu/earth107/node/6">https://www.e-education.psu.edu/earth107/node/6</a></li> </ul>	Submit Module 1 Work to D2L
<b>Tues, 6/9</b>	<b>Module 2: A Global Glance at Coastal Landscapes (Geology &amp; Plate Tectonics of Coastlines)</b>	Online Lecture Complete Module 2 Assignments <ul style="list-style-type: none"> <li>• Read Module 3 and associated readings for tomorrow</li> <li>• <a href="https://www.e-education.psu.edu/earth107/node/517">https://www.e-education.psu.edu/earth107/node/517</a></li> </ul>	Submit Module 2 Work to D2L
<b>Wed, 6/10</b>	<b>Module 3: Coastal Systems: Landscapes and Processes</b>	Online Lecture Complete Module 3 Assignments	Submit Module 3 Work to D2L
<b>Thurs, 6/11</b>	Google Earth Virtual Field Trip & Section 1 Wrap-up	Online Lecture: Capstone Project Initiation & Planning Capstone Project Stage 1: <a href="https://www.e-education.psu.edu/earth107/node/1036">https://www.e-education.psu.edu/earth107/node/1036</a> <ul style="list-style-type: none"> <li>• Read Module 4 and associated readings for tomorrow</li> </ul> <a href="https://www.e-education.psu.edu/earth107/node/517">https://www.e-education.psu.edu/earth107/node/517</a>	
<b>Section 2: Intro. to Coastal Hazards: Long &amp; Short-term Processes of Change &amp; Their Impacts on Society</b>			
<b>Fri, 6/12</b>	<b>Module 4: Understanding Sea Level Change</b>	Online Lecture: Read Section 2 overview: <a href="https://www.e-education.psu.edu/earth107/node/821">https://www.e-education.psu.edu/earth107/node/821</a> Complete Module 4 Assignments <ul style="list-style-type: none"> <li>• Read Module 5 and associated readings for Monday</li> </ul>	Submit Module 4 Work to D2L
Week 2	Section 2: Intro. to Coastal Hazards Continued..		
<b>Mon, 6/15</b>	<b>Module 5: Coastal Catastrophes: Storms and Tsunamis</b>	Online Lecture Complete Module 5 Assignments <ul style="list-style-type: none"> <li>• Read Module 6 &amp; associated readings for tomorrow</li> <li>• <a href="https://www.e-education.psu.edu/earth107/node/526">https://www.e-education.psu.edu/earth107/node/526</a></li> </ul>	Submit Module 5 Work to D2L
<b>Tues, 6/16</b>	<b>Module 6: Impacts on the Societies and Economics of Coastal Regions</b>	Online Lecture Complete Module 6 Assignments <ul style="list-style-type: none"> <li>• Revisit Capstone Project Materials for tomorrow</li> </ul>	Submit Module 6 Work to D2L
<b>Wed, 6/17</b>	Google Earth Virtual Field Trip & Section 2 Wrap-up	Online Lecture: Capstone Project Stage 2: <a href="https://www.e-education.psu.edu/earth107/node/1037">https://www.e-education.psu.edu/earth107/node/1037</a> Read Section 3 overview for tomorrow <a href="https://www.e-education.psu.edu/earth107/node/517">https://www.e-education.psu.edu/earth107/node/517</a> Read Module 7 and associated readings for Monday <ul style="list-style-type: none"> <li>• <a href="https://www.e-education.psu.edu/earth107/node/527">https://www.e-education.psu.edu/earth107/node/527</a></li> </ul>	

Section 3: Coastal Engineering, Mitigation, and Society Response to Coastal Hazards				
Thurs, 6/18	<b>Module 7: Hard Structures and Coastal Modifications through Mimicking Natural Processes</b>	Online Lecture: Section 2: <a href="https://www.e-education.psu.edu/earth107/node/821">https://www.e-education.psu.edu/earth107/node/821</a> Complete Module 7 Assignments • Read Module 8 and associated readings for tomorrow <a href="https://www.e-education.psu.edu/earth107/node/694">https://www.e-education.psu.edu/earth107/node/694</a>		Submit Module 7 Work to D2L
Fri, 6/19	<b>Module 8: Managed Retreat/Multi-Layered Protection</b>	Online Lecture: Section 2: <a href="https://www.e-education.psu.edu/earth107/node/821">https://www.e-education.psu.edu/earth107/node/821</a> Complete Module 8 Assignments Pack and get everything ready for the trip to Wallops		Submit Module 8 Work to D2L
<b>Week 3</b>	<b>Section 3: Coastal Engineering, Mitigation, and Society Continued</b>			
Sun, 6/21	Arrive at CB Field Station for Face-to-Face	<b>Morning</b> Drive Safely!	<b>Afternoon</b> Arrive Prior to 3:00 p.m.	<b>Evening</b> <b>Capstone Project Progress Updates and Benchmarking and Schedule Overview</b>
Mon, 6/22	<b>Field Trip 1: Coastal Zone: Landforms, and Processes</b>	8:30 a.m. Wallops Island – Land/Marsh Trip	1:30 p.m. Assateague Island – D-Dike Land/Marsh Trip	6:30 – Field Data Analysis Lab Work & Capstone Project Work
Tues, 6/23	<b>Field Trip 2: Coastal Zone: Processes of Change &amp; Their Impacts</b>	8:00 a.m. <b>Kayak Trip Gargatha Landing, Metompkin Inlet, Kegotank Bay</b>	1:30 <b>Kayak Trip</b> Cont'd <b>Gargatha Landing, Metompkin Inlet, Kegotank Bay</b>	6:30 Guest Lecture – CNWR/NASA STAFF Read Module 9 & associated readings: <a href="https://www.e-education.psu.edu/earth107/node/695">https://www.e-education.psu.edu/earth107/node/695</a>
Wed, 6/24	<b>Module 9: Smart Building</b> <b>Field Trip 3: Coastal Zone: Engineering</b>	8:00 a.m. <b>Kayak Trip Cape Charles and Southern Delmarva</b>	1:30 <b>Kayak Trip</b> Cont'd <b>Cape Charles and Southern Delmarva</b>	<b>Complete and Submit Module 9 Work to D2L</b> Read Section 4 & associated readings: <a href="https://www.e-education.psu.edu/earth107/node/819">https://www.e-education.psu.edu/earth107/node/819</a>
Thurs, 6/25	<b>Field Trip 4: Coastal Zone: Society and Policy Making</b>	8:00 a.m. <b>Boat Trip: Assateague Channel and around Chincoteague Island</b>	1:00 <b>Boat Trip Continued: Assateague Channel and around Chincoteague Island</b>	6:30 Section 3 Wrap-up Field Data Analysis Lab Work & Capstone Project Work
<b>Section 4: Society and Policy Making – Sustainability and Vulnerability</b>				
Fri, 6/26	<b>Field Trip 5: Capstone Survey Work</b>	8:30 a.m. <b>Boat Trip to Chincoteague Island</b>	1:00 <b>Final Capstone Project Work</b>	6:30 Clean Lab, Load Van, Prepare Dorms & Your Belongings for Departure Tomorrow
Sat, 6/27	Course Wrap-Up	8:30 a.m. Capstone Presentations,	1:00 Departure	Ensure all final project documents (audit materials, presentation, etc.) are uploaded to D2L for grading before departure. <b>Turn in Field/Lab Notebooks by 1:00 p.m.</b>
<p><i>We know we're going to have sea rise. This is literally a one-way street now. The only thing we're discussing now is how fast, it's not whether it is going to happen anymore, it is however how much.</i></p> <p>—Harold Wanless, Professor Emeritus, Department of Geological Sciences at the University of Miami</p> <p><i>"You'll need to think about buying a home the way you think about buying a car. You purchase it, use it for a while, and as time goes on, it stops being an asset. The idea of legacy and the idea of investment, those won't apply here anymore."</i></p> <p>—Nancy Gassman, Ph.D., Natural Resources Administrator, Energy and Sustainability Program, Broward County Natural Resources Planning and Management Division</p> <p><i>"It's not just a matter of real estate. And it's not just a matter of enjoying the land. It's a matter of sustaining the whole economy in the area. We obviously have to plan on building with great land use. However, building is still possible."</i></p> <p>—Bonnie Lazar, Keller Williams Realty Services, Boca Raton; past President. Realtors Association of the Palm Beaches</p>				

N-World SLO's	Assessment Embedded In:	Amended Response
<p>SLO 1: The student understands how the scientific method involves experimentation or empirical observations that are used for the development, testing, and application of models, theories, or laws.</p>	<p><b>SECTION 1:</b> Introduction to Geography &amp; Geology of the Coastal Zone  Course Capstone Project</p>	<p><b>Section 1:</b> Incorporates multiple formative assignments (all embedded in D2L) within 3 distinct modules (Modules 1-3). These include quizzes on assigned readings (and video/podcast episodes from “got science”), written discussion responses and Google Earth-based labs.</p> <p>The course capstone provides an opportunity for summative assessment as it integrates requirements for students to demonstrate learning from each of the prior modules.</p>
<p>For instance, in <b>MODULE 1: The societies and Economics of Coastal Regions - The quiz, the discussion post, and the lab</b> ask students to study the geography and geology (SCIENCE) of coastal hazards by considering several global case studies and locations from their experience. Among other tasks, students will reflect on how the scientific method has been applied in coastal science to develop and test hypotheses based on both empirical (historical records/measurements) and geospatial models that predict the rates and impacts of sea level rise and other hazards on human economies, infrastructure, and natural environments.</p> <p><u>In the D2L quiz, and group discussion</u>, students will directly respond to questions that ask them to define the steps on how scientists have developed and supported theories relevant to coastal zone issues, and the vulnerability/sustainability assessments of communities located at or very near sea level.</p> <p><u>In the lab</u>, students will use simple measurement tools embedded in Google Earth to measure proximity to the ocean and land areas of two coastal cities (Guangzhou, China and New Orleans), and produce elevation profiles of each city to assess relative risk. They will in turn develop their own observations, generate their own hypotheses, and assess their own ideas using methods available to them to develop theories/predictions stemming from sea level rise to that specific region. These will be completed and turned in with their summary reports/assessments of each coastal city.</p> <p><b>Assessment of SLO's?</b> In similar fashion to my Intro to Geology classes, I will utilize the following grade breakdown to determine the competency of the student relative to the SLO. The combined average of scores on direct and indirect assessments of Module 1 will be used.</p> <ul style="list-style-type: none"> <li>• <b>Mastery Level</b> – score of &gt;95</li> <li>• <b>Proficient Level</b> – score of 85-94.99</li> <li>• <b>Developing Level</b> – score of 75-84.99</li> <li>• <b>Emerging Level</b> – score of 65-74.99</li> <li>• <b>Unsatisfactory Level</b> -- score of &lt;65</li> </ul> <p><b>Note:</b> Upon completion of the course and capstone, I will revisit the student’s scoring to see if a change in competency category is warranted based upon other submitted work/performance.</p>		

<p>SLO 2: The student demonstrates a broad understanding of scientific principles and theories specific to the discipline, and can explain their origins.</p>	<p>Section 2: Long and Short-Term Processes of Change and Their Impacts on Society</p> <p>Course Capstone Project</p>	<p>Incorporates multiple formative assignments (all embedded in D2L and/or the course website) within 3 distinct modules (<b>Modules 4-6</b>). These include quizzes on assigned readings and embedded videos (including readings on Plate Tectonic Theory, Paleoclimatology from Ice Cores, and Isotopic Records of Climate Change, etc.), and additional Google Earth-based and Excel-based labs.</p> <p>The course capstone provides an opportunity for summative assessment as it integrates requirements for students to demonstrate learning from each of the prior modules.</p>
<p>The quizzes, and labs ask students to study the evolution of coastlines, consider geologic history and plate tectonics, erosion/sedimentation, and factors that change climate and lead to sea level change. Among other tasks, students consider key theories of modern geoscience, including theories centered around plate tectonics, and variables that interact to produce diverse coastal landscapes as a result of eustatic (global) sea level change, as well as local/relative sea level change (i.e. from subsidence, glacial rebound, etc.). Students also consider extrinsic variables that change climates in cyclical fashion (i.e. Milankovitch Orbital Cycle theory, Solar Insolation Variability), as well as intrinsic variables including human-induced impacts to greenhouse gas emissions.</p> <p><u>In the D2L quizzes</u>, students will directly respond to questions that ask them to define both the key tenants of hypotheses and widely accepted theories (as noted above), the data/methods that are used to support them, and the challenges that exist for each- including from anti-science movements (i.e. “flat-earthers”, climate change denialists, etc.).</p> <p><u>For example in ONE lab</u>, students will once again use tools embedded in Google Earth to compare and contrast land areas of coastal regions (Greenland, Cascade Region of NW U.S., Niger/Ganges/Brahmaputra River Deltas, and the U.S. East Coast, etc.). They will ascertain presence/absence of specific landform/bathymorphic features indicative of different tectonic regions, and connect these to plate tectonic and sea level history and theory. In this case, students will demonstrate their ability to APPLY these key theories to these specific case study regions by answering questions on the laboratory worksheet. To answer these questions effectively, students will have to demonstrate they have read, understand, and can apply the theories to interpret their assigned case study locations.</p> <p><b>Assessment of SLO’s?</b> I will utilize the combined average of scores on direct and indirect assessments of Module 4 will be used.</p> <ul style="list-style-type: none"> <li>• <b>Mastery Level</b> – score of &gt;95</li> <li>• <b>Proficient Level</b> – score of 85-94.99</li> <li>• <b>Developing Level</b> – score of 75-84.99</li> <li>• <b>Emerging Level</b> – score of 65-74.99</li> <li>• <b>Unsatisfactory Level</b> -- score of &lt;65</li> </ul>		

<p>SLO 3: The student critically evaluates scientific information and/or solves problems using scientific data.</p>	<p>Section 3: Coastal Engineering and Society Response to Coastal Hazards &amp;</p> <p>Section 4: Society and Policy Making Course Capstone Project</p>	<p>These two sections also incorporate several formative assignments (all embedded in D2L) within 3 distinct modules (<b>Modules 7-9</b>) for section 3, and from section 4 (<b>Module 10</b>).</p> <p>The course capstone provides an opportunity for summative assessment as it integrates requirements for students to demonstrate learning from each of the prior modules.</p>
<p><u>In the labs</u>, students will once again use Google Earth, Excel, and web-based interactive tools and databases to analyze sea level rise trajectories, resulting coastal erosion and accretion rates at natural settings as well as at locations proximal to soft and hard engineered structures. Students will also contrast approaches to coastal hazard mitigation by analyzing other “solutions” and their appropriateness for specific areas. These include but are not limited to layered defenses, smart building, and building with nature as sustainable mitigation practices. All of these labs require students to evaluate scientific information for specific sites/coastal regions so that students can not only determine the level of risk, but they should also be able to use these data (and analysis of these data) to recommend solutions such as resiliency/mitigation plans (and/or policies) to solve specific vulnerability problems that are already emerging and/or will emerge in the near future.</p> <p><b>Assessment of SLO’s?</b> I will utilize the following grade breakdown to determine the competency of the student relative to the SLO. The combined average of scores on direct and indirect assessments from a subset of these modules will be used.</p> <ul style="list-style-type: none"> <li>• <b>Mastery Level</b> – score of &gt;95</li> <li>• <b>Proficient Level</b> – score of 85-94.99</li> <li>• <b>Developing Level</b> – score of 75-84.99</li> <li>• <b>Emerging Level</b> – score of 65-74.99</li> <li>• <b>Unsatisfactory Level</b> -- score of &lt;65</li> </ul>		

**Notes regarding the capstone for the course.** The capstone is to be completed in 5 stages and students will be turning in specific components for formative feedback at each stage to make sure students are “on track” for the capstone final product. These will be used to guide students toward completion of the final capstone submission which requires students to complete a vulnerability audit for a selected site (i.e. Chincoteague Island, VA). Students are provided with a template for the audit drawn iteratively from concepts and discussion points from the modules. Students must complete the audit form using the template (i.e. to form their background research notebook – which also **must include FIELD data** from their field notebook), and then they must integrate these findings to produce a PowerPoint presentation that includes at minimum the following:

- A title slide.
- A slide including one or more maps, annotated using text and symbols in PowerPoint, conveying the most important points about the selected site.
- At least eight (8) Figures (photos, graphics, graphs of data) that help the viewer understand the details about the chosen site and the vulnerability of the site. These data will come directly

from field-based assessments during the onsite component of the course. All Figures need to include captions and attributions (as applicable/necessary). Figures can include graphs or other kinds of data as well as photos. Students must use data resources used during the course.

- Summary pages (2) with bullet points summarizing the most important take-away messages you want to get across about your site.
- At least one (1) page outlining your Recommended Resiliency Actions for your city.
- Students will deliver their capstone presentations on the last day of class.

**Assessment of SLO's?** I will utilize the final capstone primarily to re-assess student performance relative to the SLO's. Students who performed poorly on individual assignments, will be assessed at the conclusion of the course for competencies that are critical outcomes of the course.

Can students effectively demonstrate the ability to objectively collect, evaluate, and present scientific data to present reasonable solutions designed to reduce vulnerability both to human and natural landscapes and improve longer-term sustainability for coastal regions?

The oral presentation and the PowerPoint itself will constitute 20% of the course grade and students will also be required to submit their field notebook for 10% additional. Thus, ~ 30% of the course grade will be used to assess whether students overall are able to demonstrate clear abilities to critically evaluate scientific information and solve problems using scientific data.

- **Mastery Level** – score of >95
- **Proficient Level** – score of 85-94.99
- **Developing Level** – score of 75-84.99
- **Emerging Level** – score of 65-74.99
- **Unsatisfactory Level** -- score of <65

## MINUTES

First Year Experience Subcommittee, General Education Council,  
3:30 PM February 4, 2020 DHC 004

- I. Dr. Cella called the meeting to order at 3:30 pm. Attendance at the meeting included: A. May, J. Smith, S. Burg, C. Bennet,
- II. GEC Grants: Review grant process for FYE programming
  - a. Are larger field trips sustainable?
    - i. Split money to set aside one pot for smaller grants
    - ii. Themed events on campus as possibility for bigger grants
    - iii. Assessment of programming to ensure they are meeting Program Goals
    - iv. SGA Student Advisory group to share costs for big trip
- III. Transfer Policy: Review of transfer Policy (Appendix A)
  - a. Decrease incoming transfer students from 45 credits to 30 credits
    - i. Alleviates some financial burden for students
    - ii. Having a higher credit threshold can make students with some college experience created frustration with the class
      1. Transfer students still have option to take
    - iii. Under 2.0 GPA must take UNIV101
- IV. Brief discussion of final essay assignment
  - a. April first assess assignment
  - b. For next meeting, norm rubric
  - c. Review in curriculum committee

## MINUTES

## Attachment G

First Year Experience Subcommittee, General Education Council,  
3:30 PM March 3, 2020 DHC 004

- I. Dr. Cella called the meeting to order at 3:30 pm. Attendance at the meeting included: A. May, J. Smith, S Burg, C. Bennet, W. Kubasko (Zoom)
- II. GEC Grants: continue of discussion
  - a. The GEC FYE discussed the best use of GEC grant funds to support the work of FYE and to allow adequate funds for other general education courses. The committee recommends that \$5,000 be earmarked specifically for programs on campus or in the community that would connect with UNIV 101 learning objectives, and that would be open to all UNIV 101 students. This could be portion of the existing GEC grant funds, or an additional amount. The committee raised the question of whether or not if this occurred if UNIV 101 faculty could still apply for GEC Grants.
  - b. Action Item: Discussion with the GEC Grants Committee.
- III. Scheduling: Discussion of efforts to maximize enrollment of 20 seat FYE classes
  - a. Keep cap at 20, but over enroll to 22
    - i. some redistribution, some uneven melt
- IV. FYE Experience Conference: Impressive positive feedback on program
  - a. Stands out for Peer Anchor and 3-credit class
- V. Norming: members assessed one essay using rubric
  - a. Some errors on rubric (Burg will correct)
  - b. Potential need for definitions of rubric language
  - c. Align rubric with assignment parameters
    - i. Discussion of breaking down UNIV101 rubric to be more in line with current assignment language OR Include rubric with assignments for students



## Appendix A: New transfer Policy

### **Goals:**

1. To recognize the diverse background and experience of transfer students arriving at Shippensburg University, and to develop a policy that acknowledges that students will arrive with different academic, co-curricular, and personal experiences that will shape their need for the skills and connections provided in UNIV 101.
2. To evaluate the record of each transfer student to determine whether they will benefit from the skills and experiences provided by UNIV 101.
3. To recognize that transfer students enter the university with needs that are similar to but often different from other first-year students, and to provide an appropriate experience that helps them to transition academically and socially to our institution—and that provides a foundation for academic success and timely graduation.

### **Policy:**

Starting in Fall 2019, transfer students will enter the university under the requirements of the New General Education program enacted in December 2017. However, the Admissions Office staff responsible for reviewing and evaluating transfer student transcripts will have the discretion of bringing in students under an earlier catalog year. A student can enter under the degree requirements of an earlier catalog year if doing so will enable the student to enter the university having fulfilled more of the requirements for their program of study, or it will enable the student to transfer additional credits from other accredited institutions where they have studied before arriving at Shippensburg University.

All transfer students will be required to take UNIV 101 with the following exceptions:

- Students who have completed a Bachelor's degree at an accredited institution are automatically exempt from Shippensburg University's general education requirements, and thus would not be required to take UNIV 101.
- Students who successfully completed an Associate's degree at an accredited institution would be exempt from taking UNIV 101 at Shippensburg University.
- Students who transferred fewer than 30 45 credits from one or more other accredited institutions that will be applied towards their program of study at Shippensburg University would be exempt from taking UNIV 101 at Shippensburg University. Transfer students arriving at Shippensburg University with 30-45 credits will be required to take UNIV 101 if they arrive with a grade point average less than 2.0.
- Students who have completed a first-year seminar at an accredited institution that is determined to have comparable learning objectives to UNIV 101 will be able to use that course to fulfill the requirement for UNIV 101. The Office of Admissions and the Faculty Coordinator(s) of the First Year Experience will work together to develop a list of courses at other institutions deemed equivalent to Shippensburg's UNIV 101.

**Appeals Process:** Transfer students who are able to apply at least fifteen credits of coursework completed at another accredited institution towards their Shippensburg University degree requirements and who do not meet the criteria listed above may appeal to have the requirement for UNIV 101 waived. Waivers will be granted to students who can determine that they have met the learning outcomes for UNIV 101 in other ways, such as through college coursework, employment, or professional experiences. The Office of Admissions and the Faculty Coordinator(s) of the First Year Experience to determine the circumstances that would permit a student to have the UNIV 101 requirement waived will develop an application process and criteria jointly. Students who clearly meet the criteria will have the requirement waived as part of the Admissions process. They will substitute UNIV 101 with a free elective. For cases requiring further consideration, the Faculty Coordinators of the First Year Experience in consultation with Admissions staff will review the applications to determine whether or not students will be exempt from taking UNIV 101.

**UNIV 101 Sections for Transfer Students:** Starting in Fall 2019, sections of UNIV 101 will be designated to be exclusively for transfer students.