

PubH 6344-001
Research Methods: Application to the Culminating Experience
Spring 2016

Credits:	2
Meeting Days:	Wednesday
Meeting Time:	10:10 am – 12:05 pm
Meeting Place:	Mayo C381
Instructor:	Dr. Lyn Steffen
Office Address:	WBOB Room 426
Office Phone:	612-625-9307
Fax:	612-624-0315
E-mail:	steffen@umn.edu
Office Hours:	To schedule an appointment for an in-person meeting, email me (please allow 24-hour response time for email messages)

I. Course Description

This course will provide an opportunity for students to start and potentially complete a Culminating Experience (Research project/manuscript) involving secondary data analysis of a cross-sectional, case-control, or cohort study.

Do you know what to include or how to write the different sections of your research project/manuscript? Students will be able to work on their own project; including writing common sections found in a research project/paper: Abstract, Introduction, Study Methods, Results (text, tables, figures), Discussion, and References. The student will develop an Evidence Grid based on the literature review for a research topic. Data analysis methods will be reviewed (if needed). The student will analyze their own data for their selected project. Assistance in analyzing data will be provided or, if needed, a referral to a biostatistician. The student will describe their study results in the Results section text as well as develop tables and/or figures to display study results. Finally, the student will have the opportunity to interpret the study results and to compare and contrast these results to those found in the literature.

Acknowledgments

The content of PubH 6344 was developed by Dr. Steffen.

II. Course Prerequisites

Successful completion of Epidemiology methods and biostatistics courses. ***The student must have an idea for a Research Project by Jan 27th, submit the signed Culminating Experience Contract to Shelley Cooksey by Jan 29th, and have the data set by Feb 24th.***

III. Course Goals and Objectives

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

1. apply for IRB approval for their MPH Culminating Experience (secondary data analysis research project);
2. organize the research project to answer a study question; analyze data based upon the study question:
 - a. to understand basic SAS procedures
 - b. to understand the data by plotting it, transforming data
 - c. to create categorical variables from continuous variables
 - d. to conduct linear regression analysis (including descriptive statistics), and potentially logistic regression analysis or Cox proportional hazards regression depending on the study question.
3. to write the Abstract, Introduction, Methods, and Results sections
4. to present study results in text, table and/or figure format
5. to write a Discussion section, including a summary of study results, the interpretation of these results, and comparison of study results to those in the literature;
6. to determine the public health and policy implications of the study results; and finally
7. to prepare PowerPoint slides and present a 15-20 minute scientific oral talk (to the class) describing the study question, background, methods, results, and conclusion of the study.

IV. Methods of Instruction and Work Expectations

Class sessions will combine lecture/discussion, problem-based learning (small-group discussion) exercises, and demonstration/hands-on computer applications in the classroom. Homework assignments will include analysis of the student dataset within the context of the research question. If more data analysis instruction is needed, the instructor will assist the student, and 2) the student will bring their own research project dataset (on a flash drive) to class to conduct data analysis (if possible). Written assignments include preparing the sections of the research project manuscript and an in-class PowerPoint presentation of their project.

It is important to collaborate with your project advisor throughout the semester.

V. Course Text and Readings

No required textbook

Several journal articles selected by the instructor will be provided as required reading. In addition, the student is expected to conduct a literature review and read journal articles relevant to the project topic.

Recommended textbooks to assist with data analysis*

This course is a hands-on data analysis course and the recommended textbooks are for reference in SAS programming, study design and statistical analysis in epidemiological studies.

1. *Applied Statistics and the SAS Programming Language, 5th Edition by RP Cody and JK Smith, Pearson Education Inc., 2006
2. *SAS Programming by Example by RP Cody and R Pass, SAS Publishing, 1995
3. *Applied Logistic Regression, 2nd edition by DW Hosmer and S Lemeshow, John Wiley & Sons, Inc., 2000
4. Survival Analysis: a self-learning text, 2nd edition by David G. Kleinbaum, Mitchel Klein, Springer, 2005.
There are many other reference books available – pick the one that helps you!

Equipment and software

Students must have access to a computer to complete the data analysis assignments. Below is a list of student labs that have computers with installed SAS software.

1. A150 Mayo
2. 50 HHH
3. B60 Coffman Union
4. WBOB (Behind Shelley Cooksey's office)
5. Bio-Medical Library, Diehl Hall
6. Classroom Office Building 135 on St. Paul campus

Required statistical software – SAS (if you have your own computer; however, recent policy changes discourage analysis of NIH data on personal computers)

PC SAS (student license fee is about \$30)

VI. Course Outline/Weekly Schedule

Most class sessions will include the following topics: 1) reviewing data analysis methods/procedures and in-class time will be provided so that you may analyze your data, and 2) discussion of writing skills and what to include in the MPH project/manuscript (Abstract, Introduction, Methods, Results, Discussion, Tables/Figures, and References).

Due to the variety of projects/topics we will discuss in class, the syllabus schedule may change. But, I'll try to stick as close to the following schedule as possible.

Class date	Class Activity	Assignment
Jan 20	<p>1) Introductions (name, program/major, research interests, potential research project topic)</p> <p>2) Introduction to the course</p> <p>3) Culminating Experience: Research project proposal: send completed form to Shelley Cooksey by Jan 29</p> <p>see: http://docs.sph.umn.edu/epich/student/Culminating-Exp-Approval.pdf</p> <p>a. Outline your research project</p> <p>b. 3 committee members: academic advisor, project advisor, outside member</p> <p>c. This form needs signatures from 2 of the committee members</p> <p>4) Apply for IRB approval to conduct a research project (submit to the IRB by Feb 10). Usually a 1 week timeline to receive IRB approval for student secondary data analysis projects.</p> <p>Suggested reading: IRB application materials:</p> <p>All students at the University of Minnesota who conduct any research using human subjects are required to submit their research proposal to the University of Minnesota Institutional Review Board (IRB) for approval prior to conducting their study. For secondary data analysis projects, the student should not start analyzing data until they have received IRB approval for their project. For forms and information about IRB applications, go to: www.research.umn.edu/irb/ (click on <u>For Students</u> on the left side Menu).</p> <p>http://www.research.umn.edu/irb/forms.html#.Ut9WNV/Pnbwc</p> <p>We will review the IRB student application form today</p>	<p>Assignment 1: due Jan 27</p> <p>-Culminating Experience Contract to Shelley Cooksey (by Jan.29) and Dr. Steffen</p> <p>Assignment 2:</p> <p>-submit IRB application to the IRB and Dr. Steffen by Feb 10</p>
Jan 27	<p>Assignment 1 due today (Culminating Experience Contract)</p> <p>1) Any questions about the IRB application?</p> <p>2) Anatomy of a research study (or manuscript) using STROBE</p> <p>3) Critically review a research article (in class)</p> <p>4) Complete an Evidence Grid (table) for your project</p> <p>5) <i>Assigned reading:</i></p> <p>Vandenbroucke JP, von Elm E, Altman DG, Gøtzsche PC, Mulrow CD, Pocock SJ, Poole C, Schlesselman JJ, Egger M, for the STROBE initiative. Strengthening the Reporting of Observational Studies in Epidemiology (STROBE): Explanation and Elaboration. Arch Intern Med 2007;147:W163–W194.</p>	<p>Assignment 3: due Feb 3</p> <p>Critically review a journal article using STROBE criteria</p>
Feb 3	<p>Assignment 3 due today (Critical Review)</p> <p>1) How do I start my project and what do I write?</p> <p>a. Organizing and writing the Introduction</p> <ul style="list-style-type: none"> o What is your study question/objective? o What is known; what is not known about your question? <p>b. Literature review</p> <ul style="list-style-type: none"> o Selecting articles for your project o Creating an Evidence Grid (table) <p>c. Reference list (format is important)</p> <p>2) <i>Assigned reading:</i> Select a journal article similar to your project; start reviewing the literature to answer your study question</p>	

Feb 10	<p>Assignment 2 due today (IRB application)</p> <ol style="list-style-type: none"> 1) Focusing on the Evidence Grid <ul style="list-style-type: none"> How does the information help me write the Introduction and refine my study question? 2) Organizing and writing the Methods section: Population, Data Collection/Measurements, Statistical methods <ol style="list-style-type: none"> a. Study population b. Data collection and measurements 	<p>Assignment 4 is due Feb 24: Write the Introduction section of your project.</p> <p>Assignment 5 is due Mar 2: Write the Methods section (population + data collection only)</p>
Feb 17	<p>Statistical Methods</p> <ol style="list-style-type: none"> 1) Review data analysis methods section in a journal article 2) Develop an analysis plan to answer your research question 3) Create tables to assist in the development of the analysis plan 4) Suggested reading: <ol style="list-style-type: none"> a. Find a journal article related to your research project with a similar study design b. Biostats or Epi text 	<p>Develop an analysis plan for your project;</p>
Feb 24	<p>Assignment 4 due today (Introduction)</p> <ol style="list-style-type: none"> 1. More about data analysis <ol style="list-style-type: none"> a. Bring your dataset to class for in-class data analysis session b. Data analysis plan: descriptive statistics, multiple regression, confounding c. Writing the Statistical analysis section following your data analysis plan d. Create Table 1: Baseline characteristics (or understanding the characteristics of your study population), if you have your data. 	<p>Assignment 6 is due Mar 30</p> <p>Write the statistical analysis methods section based on your analysis plan</p>
Mar 2	<p>Assignment 5 due today (Methods, except statistical methods)</p> <ol style="list-style-type: none"> 1. What other tables are needed? Create at least 2 more tables to display your study results 2. Read and review your work: compare items in the STROBE checklist to those in your paper. <ol style="list-style-type: none"> a. Does your Statistical Analysis methods section reflect how the data were analyzed? b. What about your Introduction and Methods (population, data collection). Reread and potentially revise?? Is your Introduction section set up your research problem? <ul style="list-style-type: none"> Any questions? 3. Are you analyzing your data to answer your research question? <ol style="list-style-type: none"> a. In-class data analysis 	
Mar 9	<ol style="list-style-type: none"> 1. Writing the Statistical Methods section 2. Organizing and writing the Results section (text, tables/figures) <ol style="list-style-type: none"> a. Developing Tables and Figures b. Writing the results text following the results in your tables and figure c. In-class data analysis 	<p>Assignment 7 is due Mar 30:</p> <p>Written Results text section + tables and figures (if any figures). You must include at least 3 tables.</p>
Mar 16	<p>SPRING BREAK (HAVE A SAFE AND ENJOYABLE WEEK)</p>	
Mar 23	<ol style="list-style-type: none"> 1. Results section, more on tables and figures <ol style="list-style-type: none"> a. Writing is a skill: practice, practice, practice 2. Discussion section: <ol style="list-style-type: none"> a. Paragraph 1 summarize your findings; b. Comparison of your results to those in the literature; 3. Update your literature review and Evidence Grid 4. In-class data analysis 	

<p>Mar 30</p>	<p>Assignments 6 (statistical methods) & 7 are due today (Results text + tables, figures)</p> <p>Discussion section: What do I discuss?</p> <ol style="list-style-type: none"> a. Paragraph 1: summary of study results b. Comparison of study results to those in the literature c. Mechanisms d. Strengths and limitations (Bradford Hill criteria) e. Public health implications of your study 	<p>Assignment 8 DRAFT due April 20:</p> <p>[Final 1st Draft due 5/11]</p> <p>Write the Discussion section, References (submit the entire MPH project)</p>
<p>Apr 6</p>	<p>Public Health Importance</p> <ol style="list-style-type: none"> 1. Is my study important? Do your study findings relate to Public Health Policy <ol style="list-style-type: none"> a. What are the public health implications of your study results? b. policy in epidemiology/public health 2. Data analysis (continued) <p><i>Suggested reading:</i> Select a journal article relevant to your topic that focuses on public health policy</p> 	
<p>Apr 13</p>	<p>Presentation of your Project</p> <ol style="list-style-type: none"> 1. Presenting your research project results 2. PowerPoint presentations – format for 12-15 slides 3. Data analysis (continued) 4. <i>Homework Assignment #9:</i> Prepare and present in class PowerPoint slides describing your MPH project. Include on your slides: title slide, background, research question/study hypothesis or objective, description of your study design, study population, study methods, results, and interpretation of results, and public health implications of your study. About 15-20 slides/15-20 minute oral presentation on May 6th <p>Email your slides to me on May 6th (pdf or ppt file)</p>	<p>Assignment 9:</p> <p>Prepare and present 15-20 slides describing your research project May 4</p>
<p>Apr 20</p>	<p>Assignment 8 is due today (draft of your research project)</p> <ol style="list-style-type: none"> 1. Preparing the Abstract: <ol style="list-style-type: none"> a. structured b. unstructured 2. You have already selected a journal that you would like to submit your research paper; format and write the abstract based on the formatting in the selected journal. 	<p>Assignment 10 due April 27</p> <p>Draft an abstract for your research paper.</p>
<p>Apr 27</p>	<p>Assignment 10 is due today (abstract)</p> <ol style="list-style-type: none"> 1. PowerPoint presentation: any questions? 2. Reviewing tips: Critically review your own work 3. Data analysis; work on your project 4. <i>Suggested Reading: Academic Medicine 2001; 76: 922-951.</i> 	<p>Assignment 11</p> <p>Revised draft of your Research project is due May 11</p>
<p>May 4</p>	<p>Oral presentation of your research project today: Assignment 9</p> <p>Presentations should include 15-20 Powerpoint slides to describe your project, including title slide, background, study question/objective, methods, study results, conclusion, and public health implication(s) of your study results.</p>	
<p>May 11</p>	<p>Assignment 11 is due today (REVISED Research Project) DRAFT #2</p> <p>Revised research project (assignment11) due before or on May 11th at 5pm: email your revised research project to steffen@umn.edu</p> <p>There will NOT be a final exam</p>	

VII. Evaluation and Grading

Grades will be determined from attendance, performance in class, and 11 assignments.

- 25% **Active participation in class, group discussions, working on your project in class (50 points):** Students must attend 75% of all class sessions to receive a grade of C. Students are expected to participate in lecture discussions; work on your research project in class, assist your fellow students with analysis, if able. Data analysis is a collaborative effort –
- 75% **11 assignments (150 points):** Credit for assignments is based on on-time receipt of the assignment and performance. Assignments are due at the beginning of class. Late assignments will be penalized.

Assignment	Points	Description	Due
1	10	Culminating experience contract	Jan 27
2	10	IRB application submission	Feb 10
3	10	Critical review of a journal article	Feb 3
4	10	Introduction	Feb 24
5	10	Methods section (study design, population, data collection procedures and measurements)	Mar 2
6	10	Statistical methods section	Mar 30
7	10	Results section: text, tables/figures	Mar 30
8	10	Discussion section, References (submit the entire manuscript – DRAFT #1)	Apr 20
9	30	Powerpoint slides and in-class presentation	May 4
10	10	Abstract	Apr 27
11	30	Revised manuscript (DRAFT #2)	May 11
	150		

The University utilizes plus and minus grading on a 4.000 cumulative grade point scale in accordance with the following:

- A 4.000 - Represents achievement that is outstanding relative to the level necessary to meet course requirements
- A- 3.667
- B+ 3.333
- B 3.000 - Represents achievement that is significantly above the level necessary to meet course requirements
- B- 2.667
- C+ 2.333
- C 2.000 - Represents achievement that meets the course requirements in every respect
- C- 1.667
- D+ 1.333
- D 1.000 - Represents achievement that is worthy of credit even though it fails to meet fully the course requirements
- S Represents achievement that is satisfactory, which is equivalent to a C- or better.

For additional information, please refer to:

<http://policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html>.

Course Evaluation

The SPH will collect student course evaluations electronically using a software system called CoursEval: www.sph.umn.edu/courseval. The system will send email notifications to students when they can access and complete their course evaluations. Students who complete their course evaluations promptly will be able to access their final grades just as soon as the faculty member renders the grade in SPHGrades: www.sph.umn.edu/grades. All students will have access to their final grades through OneStop two weeks after the last day of the semester regardless of whether they completed their course evaluation or not. Student feedback on course content and faculty teaching skills are an important means for improving our work. Please take the time to complete a course evaluation for each of the courses for which you are registered.

Incomplete Contracts

A grade of incomplete "I" shall be assigned at the discretion of the instructor when, due to extraordinary circumstances (e.g., documented illness or hospitalization, death in family, etc.), the student was prevented from completing the work of the course on time. The assignment of an "I" requires that a contract be initiated and completed by the student before the last official day of class, and signed by both the student and instructor. If an incomplete is deemed appropriate by the instructor, the student in consultation with the instructor, will specify the time and manner in which the student will complete course requirements. Extension for completion of the work will not exceed one year (or earlier if designated by the student's college). For more information and to initiate an incomplete contract, students should go to SPHGrades at: www.sph.umn.edu/grades.

University of Minnesota Uniform Grading and Transcript Policy

A link to the policy can be found at onestop.umn.edu.

VIII. Other Course Information and Policies

Grade Option Change (if applicable):

For full-semester courses, students may change their grade option, if applicable, through the second week of the semester. Grade option change deadlines for other terms (i.e. summer and half-semester courses) can be found at onestop.umn.edu.

Course Withdrawal:

Students should refer to the Refund and Drop/Add Deadlines for the particular term at onestop.umn.edu for information and deadlines for withdrawing from a course. As a courtesy, students should notify their instructor and, if applicable, advisor of their intent to withdraw.

Students wishing to withdraw from a course after the noted final deadline for a particular term must contact the School of Public Health Office of Admissions and Student Resources at sph-ssc@umn.edu for further information.

Student Conduct Code:

The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.

As a student at the University you are expected adhere to Board of Regents Policy: *Student Conduct Code*. To review the Student Conduct Code, please see: http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf.

Note that the conduct code specifically addresses disruptive classroom conduct, which means "engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities."

Use of Personal Electronic Devices in the Classroom:

Using personal electronic devices in the classroom setting can hinder instruction and learning, not only for the student using the device but also for other students in the class. To this end, the University establishes the right of each faculty member to determine if and how personal electronic devices are allowed to be used in the classroom. For complete information, please reference: <http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html>.

Scholastic Dishonesty:

You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code: http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf) If it is determined that a student has cheated, he or she may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: <http://policy.umn.edu/Policies/Education/Education/INSTRUCTORRESP.html>.

The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: <http://www1.umn.edu/oscai/integrity/student/index.html>. If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

Makeup Work for Legitimate Absences:

Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. Such circumstances include verified illness, participation in intercollegiate athletic events, subpoenas, jury duty, military service, bereavement, and religious observances. Such circumstances do not include voting in local, state, or national elections. For complete information, please see:

<http://policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html>.

Appropriate Student Use of Class Notes and Course Materials:

Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community. For additional information, please see:

<http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html>.

Sexual Harassment:

"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy: <http://regents.umn.edu/sites/default/files/policies/SexHarassment.pdf>

Equity, Diversity, Equal Opportunity, and Affirmative Action:

The University will provide equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents Policy:

http://regents.umn.edu/sites/default/files/policies/Equity_Diversity_EO_AA.pdf.

Disability Accommodations:

The University of Minnesota is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center Student Services is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact DRC at 612-626-1333 or drc@umn.edu to arrange a confidential discussion regarding equitable access and reasonable accommodations.

If you are registered with DS and have a current letter requesting reasonable accommodations, please contact your instructor as early in the semester as possible to discuss how the accommodations will be applied in the course.

For more information, please see the DS website, <https://diversity.umn.edu/disability/>.

Mental Health and Stress Management:

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website:

<http://www.mentalhealth.umn.edu>.

The Office of Student Affairs at the University of Minnesota:

The Office for Student Affairs provides services, programs, and facilities that advance student success, inspire students to make life-long positive contributions to society, promote an inclusive environment, and enrich the University of Minnesota community.

Units within the Office for Student Affairs include, the Aurora Center for Advocacy & Education, Boynton Health Service, Central Career Initiatives (CCE, CDes, CFANS), Leadership Education and Development –Undergraduate Programs (LEAD-UP), the Office for Fraternity and Sorority Life, the Office for Student Conduct and Academic Integrity, the Office for Student Engagement, the Parent Program, Recreational Sports, Student and Community Relations, the Student Conflict Resolution Center, the Student Parent HELP Center, Student Unions & Activities, University Counseling & Consulting Services, and University Student Legal Service.

For more information, please see the Office of Student Affairs at <http://www.osa.umn.edu/index.html>.

Academic Freedom and Responsibility, for courses that involve students in research

Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom and conduct relevant research. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.* When conducting research, pertinent institutional approvals must be obtained and the research must be consistent with University policies.

Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact the instructor, the Department Chair, your adviser, the associate dean of the college, (Dr Kristin Anderson, SPH Dean of Student Affairs), or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost.

** Language adapted from the American Association of University Professors "Joint Statement on Rights and Freedoms of Students".*

Student Academic Success Services (SASS): <http://www.sass.umn.edu>:

Students who wish to improve their academic performance may find assistance from Student Academic Support Services. While tutoring and advising are not offered, SASS provides resources such as individual consultations, workshops, and self-help materials.

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