

School of Public Health

Syllabus and Course Information



PubH 7200 Section 102 Class #88034

Apps, Maps, & Google: Using technology-based Tools to Advance Public Health Research and Practice

May Term 2017

Credits: 1 credit

Meeting Days/Time: May 22, 23, 24 1:00 pm – 5:00 pm
May 26 1:00 pm – 4:00 pm

Meeting Place: Blegen Hall – Room 235

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Office Hours: By Appointment

I. Course Description

It's one thing to use apps, maps, and google (e.g., sheets, docs) in our personal lives to connect with friends, track physical activity, navigate to a new coffee shop, or collaborate on a written proposal. It's another thing to proficiently use these tools in our public health work, locally and globally. Accessible, low cost technology solutions are often underutilized in public health despite their potential for maximizing impact and efficiency. Whether a community needs assessment in North Minneapolis, an innovative micro-financing intervention in Uganda, or a multi-site program monitoring and evaluation activity in Cambodia, existing technology tools could be used to strengthen outcomes. In this course we will practically examine and apply numerous technology solutions to common public health activities and challenges. We will examine solution types (i.e., android and iphone applications, cloud-based) and

purposes (i.e., data collection, management, transfer, and storage; GIS mapping, behavior tracking; team collaboration). Led by a public health nurse interventionist and an information technology entrepreneur, students will identify solution pathways for public health challenges and activities they care about. Emphasis in this course is on learning how to use what already exists (not to create new apps per se) and how to successfully advocate for using these technology tools in current public health practice arenas locally and globally. Come prepared to learn, discuss, and engage in hands-on skills building.

Competencies:

The core competencies identified in the HRSA Council of Linkages model that apply to this course include:

1. Analytical/Assessment Skills Tier 2

1.4 Uses information technology in accessing, collecting, analyzing, using, maintaining, and disseminating data and information.

1.8 Collects valid and reliable quantitative and qualitative data

6. Public Health Sciences Skills Tier 2

6.5 Retrieves evidence from print and electronic sources to support decision making.

II. Course Prerequisites

NOTE: This is **not** a course that will be appropriate for students who already have extensive experience in mapping, or want intensive mapping content (See the GIS course offered in the Institute). Please contact the instructors if you have any questions about the fit of the course with your learning needs and current abilities.

You MUST have a laptop you can use in this course over the week. Tablets and phones have not been as optimal for a good learning experience.

III. Course Goals and Objectives

Upon completion of this course, students will be able to

- Identify three technology solutions for use in public health assessments, interventions or evaluations.
- Discuss ethical, security, and logistical considerations when using technology solutions in public health research and practice.
- Demonstrate ability to plan a technology solution for addressing a public health problem.

IV. Methods of Instruction and Work Expectations

Assigned Readings, Group Exercises

In this course we will use a variety of teaching methods and strategies including:

- Mini-lecture
- Large and small group discussions
- Time to practice with variety of technology tools

Grades will be assigned for:

1. classroom participation (20 points) including asking questions, and participating in discussions and hands-on activities,
2. three labs that will be completed inside and outside of class (60), and
3. a project (discussed first day of class and presented the last day of class) that will demonstrate student ability to incorporate technology tools into a public health activity (20 points).

V. Course Text and Readings

The required and optional readings are available through the UMN Library, which can be accessed through the course Moodle site.

Access Course Moodle Site

- go to www.umn.edu click on the “myU” button
- login with your University ID and password
- scroll to your course and click on the Moodle site link

PRIOR TO THE FIRST DAY OF CLASS

*****Complete the below readings (Birn, 2005; Howitt et al, 2012) and visit the websites, then consider the following questions:**

1. For the past 10 years (since Birn’s 2005 article) there have been significant technological advances (and uses) in public health practice and research. From local to global public health, what have been some of the most significant technology solutions used to advance public health? Which technology solutions do you feel continue to be underused in public health? Why?
2. Identify 2-3 public health priorities (using HP 2020, WHO, or SDG websites- see links in resources below) and begin to brainstorm a range of technology solutions that could be used in a variety of public health activities at (a) primary, secondary, and tertiary prevention levels and (b) for individuals, family/community, or system levels.

Readings:

Birn, AE. (2005). Gates's grandest challenge: transcending technology as public health ideology, *The Lancet*, 366, (9484), 514-519, [http://dx.doi.org/10.1016/S0140-6736\(05\)66479-3](http://dx.doi.org/10.1016/S0140-6736(05)66479-3).

Howitt, P., Darzi, A., Yang, GZ., Ashrafian, H., Atun, R., Barlow, J., Blakemore, A., Bull, A., Car, J., Conteh, L., Cooke, G., Ford, N., Gregson, S., Kerr, K., et al. (2012). Technologies for global health, *The Lancet*, 380, (9840), 507-535, [http://dx.doi.org/10.1016/S0140-6736\(12\)61127-1](http://dx.doi.org/10.1016/S0140-6736(12)61127-1).

Resources:

Gates Grand Challenges. <http://grandchallenges.org/>

Healthy People 2020. <http://www.healthypeople.gov/>

Sustainable Development Goals. <https://sustainabledevelopment.un.org/sdgs>

*****View this presentation:**

3. [Security in the Cloud](https://atmosphere.withgoogle.com/live/security-in-the-cloud/watch/keynote/why-we-are-here) by James Snow (Google Enterprise Security Director)
<https://atmosphere.withgoogle.com/live/security-in-the-cloud/watch/keynote/why-we-are-here>
(45 minutes)

*****Identify public health data:**

4. Please explore publically available data that you can use for hands-on activities and assignments during the week. We will have a dataset available as well. Some public data sources include:
 - a. [Healthdata.gov](http://www.healthdata.gov): <http://www.healthdata.gov>/
 - b. [WHO Global Health Data Repository](http://apps.who.int/gho/data/node.home): <http://apps.who.int/gho/data/node.home>
 - c. [Information is beautiful](http://www.informationisbeautiful.net/data/): <http://www.informationisbeautiful.net/data/>

ASSIGNED DURING THE WEEK (Refer to Course Outline)

Readings:

Cobb, N.K., Jacobs, M.A., Wileyto, P., Valente, T., & Graham, A.L. (2016). Diffusion of an Evidence-Based Smoking Cessation Intervention Through Facebook: A Randomized Controlled Trial. *Am J Public Health*. 2016 Apr 14:e1-e6. [Epub ahead of print]

Colubri, A., Silver, T., Fradet, T., Retzepi, K., Fry, B., & Sabeti, P. (2016). Transforming Clinical Data into Actionable Prognosis Models: Machine-Learning Framework and Field-Deployable App to Predict Outcome of Ebola Patients. *PLoS Negl Trop Dis*. 2016 Mar 18;10(3):e0004549. doi: 10.1371/journal.pntd.0004549. eCollection 2016.

- Coulon, S.M., Monroe, C.M., West, D.S. (2016). A Systematic, Multi-domain Review of Mobile Smartphone Apps for Evidence-Based Stress Management. *Am J Prev Med.* 2016 Mar 15. pii: S0749-3797(16)00052-0. doi: 10.1016/j.amepre.2016.01.026. [Epub ahead of print]
- Erickson, D., Smolenski, D., Toomey, T., Carlin, B., Wagenaar, A. (2013). Do Alcohol Compliance Checks Decrease Underage Sales at Neighboring Establishments? *Journal Of Studies On Alcohol And Drugs*, 852-858.
- Franklin, J.C., Fox, K.R., Franklin, C.R., Kleiman, E.M., Ribeiro, J.D., Jaroszewski, A.C., Hooley, J.M., & Nock, M.K. (2016). A Brief Mobile App Reduces Nonsuicidal and Suicidal Self-Injury: Evidence From Three Randomized Controlled Trials. *J Consult Clin Psychol.* 2016 Mar 28. [Epub ahead of print]
- Gordon, J.S., Armin, J., D. Hingle, M. et al. (2017). Development and evaluation of the See Me Smoke-Free multi-behavioral mHealth app for women smokers. *Behav. Med. Pract. Policy Res.* doi:10.1007/s13142-017-0463-7
- Hales, S., Turner-McGrievy, G., Fahim, A., Freix, A., Wilcox, S., Davis, R.E., Huhns, M., & Valafar, H. (2016). A Mixed-Methods Approach to the Development, Refinement, and Pilot Testing of Social Networks for Improving Healthy Behaviors. *JMIR Hum Factors.* 2016 Feb 12;3(1):e8. doi: 10.2196/humanfactors.4512.
- Higgs, E.S., Goldberg A.B., Labrique, A.B., Cook, S.H., Schmid, C., Cole, C.F., Obregon, R.A. (2014). Understanding the Role of mHealth and Other Media Interventions for Behavior Change to Enhance Child Survival and Development in Low- and Middle-Income Countries: An Evidence Review. *Journal of Health Communication*, 19:164–189.
<http://www.tandfonline.com/doi/pdf/10.1080/10810730.2014.929763?needAccess=true>
- Hodson, H. (2014). Mapping in a crisis. *New Scientist*, 222(2964), 19.
<http://www.sciencedirect.com.ezp1.lib.umn.edu/science/article/pii/S0262407914607223>
- [Optional] Kruger et al (2008). Using GIS to Facilitate Community-Based Public Health Planning of Diabetes Intervention Efforts. *Health Promotion Practice.* doi: 10.1177/1524839906293396
- Less, E., McKee, P., Toomey, T., Nelson, T., Erickson, D., Xiong, S., Jones-Webb, R. (2015) Matching Study Areas Using Google Street View: A New Application For An Emerging Technology *Evaluation And Program Planning* 53, 72–79
- Mangone, E.R., Lebrun, V., Muessig, K.E. (2016). Mobile Phone Apps for the Prevention of Unintended Pregnancy: A Systematic Review and Content Analysis. *JMIR Mhealth Uhealth.* 2016 Jan 19;4(1):e6. doi: 10.2196/mhealth.4846.
- Marcano Belisario, J.S., Jamsek, J., Huckvale, K., O'Donoghue, J., Morrison, C.P., & Car. J. (2015). Comparison of self-administered survey questionnaire responses collected using mobile apps versus other methods. *Cochrane Database Syst Rev.* 2015 Jul 27;7:MR000042. doi: 10.1002/14651858.MR000042.pub2.
- Nelson, T.A., Denouden, T., Jestico, B., Laberee, K., Winters, M. (2015). BikeMaps.org: A Global Tool for Collision and Near Miss Mapping. *Front Public Health.* 2015 Mar 30;3:53. doi: 10.3389/fpubh.2015.00053. eCollection 2015.
- [Optional] Nykiforuk, C. I., & Flaman, L. M. (2009). Geographic information systems (GIS) for health promotion and public health: a review. *Health promotion practice.*
- Singh et al (2016). Developing a Framework for Evaluating the Patient Engagement, Quality, and Safety of Mobile Health Applications. *The Commonwealth Fund, Issue Brief*, February 2016.
- Sullivan, R.K., Marsh, S., Halvarsson, J., Holdsworth, M., Waterlander, W., Poelman, M.P., Salmond, J.A., Christian, H., Koh, L.S., Cade, J.E., Spence, J.C., Woodward, A., Maddison, R. (2016). Smartphone Apps for Measuring Human Health and Climate Change Co-Benefits: A Comparison and Quality Rating of Available Apps. *JMIR Mhealth Uhealth*, 4(4):e135 DOI: 10.2196/mhealth.5931
- USAID. 2016. Getting from A to B: gets easier in Tanzania with new mapping open data. Posted by Andrew Inglis and Marasi Mwencha. <https://blog.usaid.gov/2016/11/getting-from-a-to-b-gets-easier-in-tanzania-with-new-mapping-open-data/>
- Wang, J.B., Cadmus-Bertram, L.A., Natarajan, L., White, M.M., Madanat, H., Nichols, J.F., Ayala, G.X., Pierce, J.P. (2015). Wearable Sensor/Device (Fitbit One) and SMS Text-Messaging Prompts to Increase Physical Activity in Overweight and Obese Adults: A Randomized Controlled Trial. *Telemed J E Health.* 2015 Oct;21(10):782-92. doi: 10.1089/tmj.2014.0176. Epub 2015

VI. Rough Course Outline

	Topics Covered	Readings/Activities
Pre-class Work	See above! Be prepared to engage in small group discussions about the readings, questions posed, and the security presentation.	
Monday	<p><u>Introductions</u></p> <p><u>Course Expectations</u></p> <p><u>Overview of Technology Tools & Solutions Used in Public Health</u></p> <p><u>Overview of the Cloud</u></p> <ul style="list-style-type: none"> - Data Management - Collaboration - Data Security <p><u>Lab #1</u></p>	<p>Suggested Readings (Assigned in class):</p> <p><u>Data Assessment/Surveillance</u></p> <p>Colubri et al (2016). Transforming Clinical Data into Actionable Prognosis Models: Machine-Learning Framework and Field-Deployable App to Predict Outcome of Ebola Patients.</p> <p>Marcano et al (2015). Comparison of self-administered survey questionnaire responses collected using mobile apps versus other methods.</p> <p>Sullivan et al (2016). Smartphone Apps for Measuring Human Health and Climate Change Co-Benefits: A Comparison and Quality Rating of Available Apps.</p> <p><u>Mapping</u></p> <p>Less, E., McKee, P., Toomey, T., Nelson, T., Erickson, D., Xiong, S., Jones-Webb, R. (2015) Matching Study Areas Using Google Street View: A New Application For An Emerging Technology <i>Evaluation And Program Planning</i> 53, 72–79</p> <p>Hodson (2014). Mapping in a crisis.</p> <p>USAID (2016). Getting from A to B: gets easier in Tanzania with new mapping open data. Posted by Andrew Inglis and Marasi Mwencha.</p>
Tuesday	<p><u>Data Tools Part 1</u></p> <ul style="list-style-type: none"> - Data capture (e.g., assessment, tracking) - Guest: GIS/Mapping: Examples in Public Health - Data manipulation/management <p><u>Lab #2</u></p>	<p>Suggested Readings (Assigned in class):</p> <p><u>Social Media/Networks</u></p> <p>Cobb et al (2016). Diffusion of an Evidence-Based Smoking Cessation Intervention Through Facebook: A Randomized Controlled Trial.</p> <p>Hales et al (2016). A Mixed-Methods Approach to the Development, Refinement, and Pilot Testing of Social Networks for Improving Healthy Behaviors.</p> <p><u>Push/Interactive Interventions</u></p> <p><u>Reviews:</u></p> <p>Coulon et al (2016). A Systematic, Multi-domain Review of Mobile Smartphone Apps for Evidence-Based Stress Management.</p> <p>Higgs et al (2014). Understanding the Role of mHealth and Other Media Interventions for Behavior Change to Enhance Child Survival and</p>

		<p>Development in Low- and Middle-Income Countries: An Evidence Review.</p> <p>Mangone et al (2016). Mobile Phone Apps for the Prevention of Unintended Pregnancy: A Systematic Review and Content Analysis.</p> <p><i>Examples:</i></p> <p>Franklin et al (2016). A Brief Mobile App Reduces Nonsuicidal and Suicidal Self-Injury: Evidence From Three Randomized Controlled Trials.</p> <p>Gorden et al (2017). Development and evaluation of the See Me Smoke-Free multi-behavioral mHealth app for women smokers.</p> <p>Wang et al (2015). Wearable Sensor/Device (Fitbit One) and SMS Text-Messaging Prompts to Increase Physical Activity in Overweight and Obese Adults: A Randomized Controlled Trial.</p> <p><u>Data Visualization</u></p> <p>Nelson et al (2015). BikeMaps.org: A Global Tool for Collision and Near Miss Mapping.</p> <p><u>Information is beautiful:</u> http://www.informationisbeautiful.net/data/</p>
Wednesday	<p><u>Intervention Tools</u></p> <ul style="list-style-type: none"> - Social media (e.g., health promotion campaigns) - Push technologies (e.g., tailored preventive efforts) - Guest: TBN <p><u>Data Tools Part 2</u></p> <ul style="list-style-type: none"> - Data visualization <p><u>Lab #3</u></p>	<p>Suggested Readings (Assigned in class):</p> <p><u>Ethics/Safety</u></p> <p>Singh et al (2016). Developing a Framework for Evaluating the Patient Engagement, Quality, and Safety of Mobile Health Applications.</p>
Thursday	<u>NO CLASS</u>	
Friday	<p><u>Dissemination Tools</u></p> <p><u>Technology Security & Ethics</u></p> <ul style="list-style-type: none"> - PHI, HIPAA, Etc <p><u>Wrap Up</u></p>	Student Presentations

VII. Evaluation and Grading

This course is offered A/F or S/N/

Grading will be determined according to the following:

- Class participation (20 points, 20% of grade)
- Labs (60 points; 20 points each; 60% of grade)
- Project assignment (20 points, 20% of grade).

Late assignments will receive 5-point deductions each day late unless pre-arranged with faculty.

A	4.000 (94-100 points/percent) Represents achievement that is outstanding relative to the level necessary to meet course requirements
A-	3.667 (90-93 points/percent)
B+	3.333 (87-89 points/percent)
B	3.000 (83-86 points/percent) Represents achievement that is significantly above the level necessary to meet course requirement
B-	2.667 (80-82 points/percent)
C+	2.333 (77-79 points/percent)
C	2.000 (73-76 points/percent) Represents achievement that meets the course requirements in every respect
C-	1.667 (70-72 points/percent)
D+	65-69 (points/percent) 1.333
D	1.000 (60-64 points/percent) Represents achievement that is worthy of credit even though it fails to meet fully the course requirements
F	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.
S	Represents achievement that is satisfactory, which is equivalent to a C- or better.

- **S/N option must complete all assignments to a C- level (70%).**

S	Achievement that is satisfactory which is equivalent to a C- or better (achievement is at the discretion of the instructor but may be no lower than a C-).
N	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.

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. **The grading option for Public Health Institute courses may not be changed after the second day of class for 4-day courses. Grading options for 2 day courses may not be changed after the first day class.**

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. Disability Services (DS) 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 DS at 612-626-1333 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 do not 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. 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.*

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, 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".