

## Course Syllabus

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### Course Information - Fall 2015

NATS 1101 - Natural Sciences and Mathematics Freshman Seminar

Section: 010                      Room: SLC 2.302                      Time: MF: 10:00 am-10:50am

Section: 013                      Room: SLC 1.202                      Time: MF: 11:00 am-11:50am

Section: 020                      Room: JSOM 11.206                      Time: MF: 4:00 pm-4:50pm

**Final: None**

**Class Attendance: Mandatory**

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### Professor Contact Information

Dr. Bernine Khan

Office: FN 3.308C

Phone: 6472/2416

Email: Bernine.Khan@utdallas.edu

Office Hours: 12 noon to 2 pm most days (please email ahead) or by appointment  
(please use email to set this up)

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### Course Pre-requisites, Co-requisites, and/or Other Restrictions

Corequisite: UNIV1010

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### Course Description

NATS 1101 Natural Sciences and Mathematics Freshman Seminar (1 semester credit hour). This course is designed to introduce incoming freshmen to the intellectual and cultural environment of the School of Natural Sciences and Mathematics (NS&M). Students will learn about plans of study and career paths for majors in Biology, Chemistry, Physics, Mathematics, Geosciences, and Science and Mathematics Education. Basic study, problem solving and other skills needed to succeed as an NS&M major will be covered. An overview of the connections within the disciplines of Natural Sciences and Mathematics will be presented, as well as their relationship to engineering, medicine and health, and other fields. Required for all first time in college freshmen in NS&M. Corequisite: UNIV 1010. (1-1) Y

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### Student Learning Objectives/Outcomes (LO)

Upon completion of this course:

1. Begin the development of Critical Thinking Skills needed in the scientific process.
2. Begin the development of Communication Skills required to explain scientific concepts.
3. Begin the development of Empirical and Quantitative Skills needed in the scientific process.
4. Begin the development of Teamwork needed in the Scientific process and community
5. Begin the development of Social and Personal Responsibility and Ethics required in the world and society at large.
6. Understand how to develop and plan for long-term goals.

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### Required Textbooks and Materials – NONE

Notes, supporting material, other resources will be posted on eLearning

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**Assignments & Academic Calendar**

Mon	Monday Topic	Fri	Friday Topic	LO
Aug 24	Write a paragraph about the nature of universities and why you are here. (CLA+)	Aug 28	Learning How to Learn	1
Aug 31	Learning How to Learn Mini Presentations	Sept 4	Introduction to UTD	1,2,4
<b>Sept 7</b>	<b>MLK Holiday</b>	Sept 11	Time Management and Schedule Organization	1,6
Sept 14	Problem Solving Video Problem-Solving Exercise	Sept 18	Visit to Library (Meet in Library Lobby) Chris Edwards (010, 013) Jay McAllister (020)	1,3,4
Sept 21	<b>QUIZ 1</b> (Scientific Debate Intro)	Sept 25	Campus Services	
Sept 28	Oral Scientific Debate 010 - (Dr. V. Hajeri) 013, 020 - (Dr. S. Taylor)	Oct 2	Midterm Madness	
Oct 5	Oral Scientific Debate 010, 013, 020 - (Dr. B. Khan) (Introduce Project)	Oct 9	Advising (Kali Cagnolatti)	1,3,6
Oct 12	Project Discussion /Experimental Design & Research Methods	Oct 16	Wellness I (Alcohol/Drugs)	1,2,4
Oct 19	Brainstorming & Creativity	Oct 23	Wellness II (Relationships)	2
Oct 26	Identifying Your Strength	Oct 30	Being Civil in a Diverse Society	5
Nov 2	TBA	Nov 6	Life Skills	1,3,4
Nov 9	TBA	Nov 13	TBA	2
Nov 16	Talk by NSM Dean Novak	Nov 20	Project Presentation	2,5
<b>Nov 23</b>	<b>Thanksgiving Holiday</b>	<b>Nov 27</b>	<b>Thanksgiving Holiday</b>	
Nov. 30	Project Presentation	Dec 4	Project Presentation	6
Dec 7	<b>QUIZ 2 (Last Day Class)</b>			

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<b>Grading Policy:</b> Class Attendance	20%
In-Class Activities/Discussions (including Debate)	30%
Quizzes & Assignments	20%
Group project (proposal, oral presentation, written report)	30%
<b>Total</b>	<b>100 %</b>

Grade ranges for NATS 1101 are: A+: 97-100; A: 93-96; A-: 90-92; B+: 87-89; B: 83-86; B-: 80-82; C+: 77-79; C: 73-76; C-: 70-72; D+: 67-69; D: 63-66; D-: 60-62; F: below 60.

**Note: Grading policy subject to change!**

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**Course & Instructor Policies**

*(make-up exams, extra credit, late work, special assignments, class attendance, classroom citizenship, etc.)*

**Exams:** There are currently no formal exams in this course. Quizzes on lecture material are shown on the schedule.

**Homework:** Homework will be assigned throughout the semester and graded.

**Semester Project:** The semester project will be assigned as shown on the schedule above. Note that the project grade is a team grade, including the presentation.

**Class Attendance: MANDATORY.** Attendance will be taken. It is your responsibility to sign the attendance sheet before leaving the classroom. All absences **MUST** be supported by a reasonable excuse. Three or more absences without a valid excuse will result in a failing grade. Some examples of a reasonable excuses include: illness/hospital - will require a note from the doctor; accident (vehicular); family emergency; religious holiday – must inform me in advance; UTD or national event/conference - must inform me in advance.

**Points deducted from grades for:** using computer & phone in class (unless authorized), talking while instructor is talking, eating in class, doing homework in class, & coming late to class.

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**Off-campus Instruction and Course Activities**

Below is a description of any travel and/or risk-related activity associated with this course.

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**Policies and Procedures for Students**

The University of Texas at Dallas provides a number of policies and procedures designed to provide students with a safe and supportive learning environment. Brief summaries of the policies and procedures are provided for you at <http://provost.utdallas.edu/home/index.php/syllabus-policies-and-procedures-text> and include information about technical support, field trip policies, off-campus activities, student conduct and discipline, academic integrity, copyright infringement, email use, withdrawal from class, student grievance procedures, incomplete grades, access to Disability Services, and religious holy days. You may also seek further information at these websites:

- [http://www.utdallas.edu/BusinessAffairs/Travel\\_Risk\\_Activities.htm](http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm)
- <http://www.utdallas.edu/judicialaffairs/UTDJudicialAffairs-HOPV.html>
- <http://www.utsystem.edu/ogc/intellectualproperty/copypol2.htm>
- <http://www.utdallas.edu/disability/documentation/index.html>

***These descriptions and timelines are subject to change at the discretion of the Professor.***