Research Careers and Professional Skills Development BIO 4953 Example Syllabus

Introduction

The UTSA Research Careers and Professional Skills <u>D</u>evelopment (RCPSD) course is designed by the MBRS-RISE and MARC U*STAR programs to guide undergraduate student researchers towards successful entry and completion of doctoral training programs. This course gives research students a "leg up" by providing information that will directly assist with their career planning, doctoral program applications, and basic research professional skills. It features lectures, discussions, visiting faculty, hands-on exercises, and a field trip to a local biotech company. By the end of the course, you will have completed a scientific poster, and oral presentation, a Curriculum Vita (Resume of science), and a personal statement that can be used for summer program or doctoral program admission. Workbook exercises accompany most activities to reinforce course instruction. Because some of the activities require that a student has research data to present, we strongly suggest that you take this course only if you are currently working, or recently worked in, a research laboratory in the sciences or engineering.

G.P. Taylor, Ph.D.

Name:	Office:	Email	Phone:	Office Hours
Dr. Gail P. Taylor	BSB 2.03.02F	<u>gail.taylor@utsa.edu</u>	x5761	drop in; T 2:00 - 3:00

Prerequisites:

Member MBRS-RISE, MARC-U*STAR, WSRTP or student interested in a career in research

Course Objective/Content:

Learn critical scientific professional skills Oral and poster presentation Personal statement creation CV Creation Evaluate your personal priorities Learn about career paths/options

Grading Policy: NOTE: This is not straight points! I can give you calculation Excel if desired.

Attendance (20%)^{\$} Workbooks and Assignments (70%)^{*} Final Examination (10%) – TIMED, but open notes.

^{\$}If you are over 20 minutes late to the class, you will be counted as absent.

* On Workbook assignments, if sufficient effort is observed, they may be turned in a second time is reached, as long as the final examination has not already happened.

Absences:

Please do not miss this class. It meets only once per week and it's like missing a week of MWF courses. Many discussions and exercises take place during the class and you will miss out on vital information. However, if you have graduate school interviews, military obligations, a scientific conference, or are horribly germ-spreading ill (talk to me by email or phone in this case), please contact me BEFORE CLASS and I will excuse up to two absences. Be aware that following an excused absence, you are still responsible for getting and completing any missed assignments. Since this is a once-per-week course, please try not to schedule Dr's Appts during this class!

Final Exam:

In Techlab, take Blackboard Final Exam - Last day of class

Grading 1 – Points:

During the course, students will have the opportunity to earn 1000 points. These points are broken down as follows:

Final Exam	200 Pts
Attendance	180 Pts
Seminars	100 Pts
Oral Presentation	100 Pts
Poster Creation	50 Pts
Personal Statement	50 Pts
Other Assignments and Quizzes.	320 Pts

Final grades will be calculated as follows.

0	
900 – 1000	Α
800 - 899	В
700 – 799%	С
600 - 699%	D
Below:	F

Be Polite:

- Cell phones must be off, unless a life threatening emergency exists- in this case use vibrate. Do NOT talk on a phone in my class
- Do NOT talk during class, unless it's during a class discussion
- Do not routinely be late to my class. If you MUST be late, please enter quietly and sit in the back.

Honor Code:

Each student is expected to complete his or her own work. Even when working as a group, individual assignments should be completed by you alone and should represent your own final thoughts. Academic dishonesty will not be tolerated.

Evolving Syllabus:

Due to circumstances beyond the instructor's control, the schedule, below, may evolve during the course of the class. Notice will be posted online. No additional major assignments will be given.

Roadrunner Creed

The University of Texas at San Antonio is a community of scholars where integrity, excellence, inclusiveness, respect, collaboration, and innovation are fostered.

As a Roadrunner, I will:

- Uphold the highest standards of academic and personal integrity by practicing and expecting fair and ethical conduct;
- Respect and accept individual differences, recognizing the inherent dignity of each person;
- Contribute to campus life and the larger community through my active engagement; and
- Support the fearless exploration of dreams and ideas in the advancement of ingenuity, creativity, and discovery.

Guided by these principles now and forever, I am a Roadrunner!

Research Career and Professional Skills Development Fall Example Classes Held in: BSB 2.03.10

All sessions subject to change without notice.

Dr. Taylor will be present during visiting speakers' talks.

All times are estimates: do not make plans to leave earlier than the normal course end time (4:50).

Date	In Class Activities	Due
OPEN	By the end of the semester, attend two scientific seminars in your field and write them up using the supplied links.	Final Exam Day
09/03	Labor Day - No Class – Read The System!	Read – The System
Day 1 9/10	Introduction to this Class – Dr. T 2 – 2:30 Introducing Yourself. 2:30 –3 :00 Javier Barranco Taking Charge of Your Training 3:10 – 3:30 – Maria Cisneros Intro to Research as a Career – Dr. T (Assignment includes Values Cards from 9/17).	Submit a strong introduction Take Charge of Your Training Intro to Research as Career WS (Includes info presented on 9/17.
Day 2 09/17	Online Scientific Information – David Barraza 2:00 – 3:00 Reading a Scientific Paper 3:10 – 4:05 – Michou Kelley Values Cards – Dr. Barea – 4:15 – 4:45	Using Pubmed/Finding Information Develop an account in LinkedIn <u>http://www.linkedin.com/</u> Scientific Paper Quiz
Day 3 09/24	Prepare for and Select a PhD program – 2 – 2:50 – Dr. T The Poster Presentation - 3:00 – 4:20 Gerry Mendoza	Finding Grad School WS Begin working on Poster. Due: 10/08
Day 4 10/01	What Happens in Graduate School - 2:00 – 2:50 – Pedro Trejo Graduate Student Forum – Visiting PhD students 3:00 – 4:15 Pedro Trejo, Justin Garcia, Celia Macias, Michou Kelley, Chris Mimun The CV – 4:20 – 4:50 Danielle Gordon	What Happens in Grad School WS Create a CV
Friday 10/05	Attend COS Research Conference! – 5 PTS EC	Present Poster at Symposium
Day 5 10/8	Applying for Doctoral Training & The Personal Statement 2:00 – 3:15 (Grad Student – Justin Garcia Intro to Endnote and Endnote exercise – Dr. T - 3:30 – 4:45	PERSONAL STATEMENT Draft due 10/17 Review other's statement 10/31 Work w Mentor! 2 nd Draft due 11/14 Final draft due 12/03
Day 6 10/15 (sfn)	Making and Giving an Oral Presentation 2:00 – 3:20 – Dr. T Intro to Working in Government Science 3:30 – 3:50 – Dr. T The Lab Notebook – 4:30 – 4:50 – Dr. T	ORAL PRESENTATION (10 Min) Submit Draft by 11/05 2 nd Draft by 11/19 Final Oral by 11/26 Government Science WS

		Lab Notebook quiz
Day 7 10/22	Understanding Your Research Project 2:30 – 3:10 – Edward Rodriguez Introducing a Guest Speaker – Rodolfo Jimenez 3:20 – 3:50 Letters of Recommendation – Ayeza Zafar 3:50 – 4:30	Endnote WS Understanding Project WS Write yourself a Letter of Rec
Day 8 10/29	Intro to Working in Academia – 2:00 – 3:00 – Dr. T Visiting Academic Scientists – 3:15 – 4:45 J. Aaron Cassill, Charlie Wilson	Working in Academia WS
Day 9 11/05	Graduate School Interviews and Practice – 2:00 – 2:50 Dr. T Scientific Skepticism – Dr. Aaron Cassill – 3:00 – 4:05 Networking in Science – Enrique Sosa – 4:15 – 4:45	Grad School Interview Worksheet Impact of Skepticism Exercise
Day 10 11/12	Intro to Postdoc Life – Annette Rodriguez invited 2 – 2:50 Funding Graduate School – Dr. T – 3:50 NIH and Grant Submissions – Dr. T - 4 – 4:50	Postdoc Worksheet Funding GS WS
Day 11 11/19	Introduction to Industry Science – 2:00 – 2:30. Dr. T Practice Oral Presentations	
Day 12 11/26	Final Oral Presentations	Final Poster or Oral PowerPoint Due
Day 13 12/03	Trip to KCl	Industry Science Workbook
Before 12/13	Arrange with Dr. T to take your final exam (Open book, open note, closed friend, up to two hours long) up until 4:00 PM on this day.	