

# Course Syllabus - TRBIO 410

<b>Course Number:</b>	TRBIO 410
<b>Course Name:</b>	Business of Biotechnology
<b>Quarter:</b>	FA
<b>Year:</b>	2018
<b>Start Date:</b>	09/04/2018
<b>End Date:</b>	12/14/2018
<b>Credits:</b>	3.0
<b>Last Date To Add This Course:</b>	09/18/2018
<b>Last Date To Drop This Course:</b>	09/18/2018
<b>Last Date To Change Grading Option:</b>	09/18/2018
<b>Minimum Class Size:</b>	5

## Meeting Days and Times

Day	Start	End	Location	Description
T	8:00 am	11:00 am	CA Campus	Graduate Office - Large Conference Room
T	11:00 am	2:00 pm	Florida Campus	B387

## Course Managers

Role	Last Name	First Name	Department	Mail Code	Phone	Email	Organization Name (non-TSRI personnel)
Course Director	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu	
TA	Bruggemann	Jacob	TSRI Graduate Program	TPC-19	(858) 784-8469	jbrugg@scripps.edu	

## Course Description

Whether establishing a lab, start-up, or a program within an existing company, opportunities are abundant and funding is scarce. To be competitive, leaders must be able to analyze the market, identify the optimal opportunity, develop a plan, and then sell their vision in order to attract talent and stakeholders. This series course integrates modern business concepts from an entrepreneurial approach. To that end, you will be transformed into an executive team, tasked with determining how best to frame your ideas to compete for funding as your transition a project of your choosing from the bench to bedside.

## Background Preparation (Prerequisites)

This course is designed for individuals with a strong scientific background and does not require formal preparation.

## Texts and Journal References

Type	Title	Author	Date	ISBN/ISSN
Useful To Consult	Reference materials will be handed out during each session for review and preparation for the following session.			

## Course Learning Outcomes

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

1. Understand how the biotechnology industry interfaces with academic science.
2. Understand how biotechnology companies are structured and financed, including the role of venture capital and corporate partnerships.
3. Relate intellectual property and regulatory affairs issues to the operating plan of a biotech opportunity.

## Course Requirements and Assignments

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1. All emailed assignments MUST have the course name and number and assignment number in the Subject Line. Additionally, in the body of the email, the student must identify his/her name.

SAMPLE SUBJECT LINE: BoB – Assignment 1

EMAILS WITH NO SUBJECT LINE OR SENT TO THE WRONG EMAIL ADDRESS WILL NOT BE GRADED.

Email the following assignments to Susy at dcatron@scripps.edu

DUE DATE ASSIGNMENT

T: 10/9 Business Model Canvas

DUE DATE ASSIGNMENT

T: 11/6 Executive Summary

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## Other Information

### Attendance Statement

Students have the opportunity to earn attendance points each class. Full attendance in each session is a key element of this grade component per the University Class Attendance and Absences policies; however, students may earn partial credit for absences, in some instances and at the Lecturer's discretion, if they communicate the reason for the partial absence to the Lecturer by e-mail in advance when possible.

### Scientific and Professional Ethics

The work you do in this course must be your own. Feel free to build on, react to, criticize, and analyze the ideas of others but, when you do, make it known whose ideas you are working with. You must explicitly acknowledge when your work builds on someone else's ideas, including ideas of classmates, professors, and authors you read. If you ever have questions about drawing the line between others' work and your own, ask the course professor who will give you clear guidance. Exams must be completed independently. Any collaboration on answers to exams, unless expressly permitted, may result in an automatic failing grade and possible expulsion from the Graduate Program.

## Course Grading Statement

A student's final grade for the course will be weighted and calculated as follows for the indicated Grading Category Items:

10% Individual Class Attendance  
15% Three Quizzes (5 points each)  
25% Business Model  
25% Executive Summary  
25% Pitch (FINAL)

All grades are determined at the Lecturer's discretion and are not negotiable.

Late or missed assignments will be considered at the Lecturer's discretion and with prior approval only; they are subject to a reduced or no grade, or denial of acceptance resulting in no grade for the affected item. Late or missed Assignment, Activity, or Simulation deadlines will not be accepted; any such occurrence will be handled at the Lecturer's discretion, including a reduced or no grade, or denial of acceptance resulting in no grade for the affected item.

In determining and assigning grades for both the individual components and the overall final course grade the following point scale will be strictly adhered to:

A 100 – 93 C 76.9 – 73  
A- 92.9 – 90 C- 72.9 – 70  
B+ 89.9 – 87 D+ 69.9 – 67  
B 86.9 – 83 D 66.9 – 63  
B- 82.9 – 80 D- 62.9 – 60  
C+ 79.9 – 77 F 59.9 and below

Students will receive points for each assignment. Requirements vary per assignment and will be communicated when assigned. Unless otherwise noted, students are to complete all assignments individually and without assistance in any form or manner.

Grading details and information regarding all other Grading Category Items noted above will be distributed and/or discussed in class.

## Letter Grade Descriptions

Letter Grade	Grade Point	Description	Learning Outcome
A	4.00	Outstanding achievement. Student performance demonstrates full command of the course subject matter and evinces a high level of originality and/or creativity that far surpasses course expectations.	
A-	3.67	Excellent achievement. Student performance demonstrates thorough knowledge of the course subject matter and exceeds course expectations by completing all requirements in a superior manner.	
B+	3.33	Very good work. Student performance demonstrates above-average comprehension of the course subject matter and exceeds course expectations on all tasks as defined in the course syllabus. There is notable insight and originality.	
B	3.00	Satisfactory work. Student performance meets designated course expectations and demonstrates understanding of the course subject matter at an acceptable level.	
B-	2.67	Marginal work. Student performance demonstrates incomplete understanding of course subject matter. There is limited perception and originality.	
C+	2.33	Unsatisfactory work. Student performance demonstrates incomplete and inadequate understanding of course subject matter. There is severely limited or no perception or originality. Course will not count toward degree.	
C	2.00	Unsatisfactory work. Student performance demonstrates incomplete and inadequate understanding of course subject matter. There is severely limited or no perception or originality. Course will not count toward degree.	
P	0.00	Satisfactory work. Student performance demonstrated complete and adequate understanding of course subject matter. Course will count toward degree.	
F	0.00	Unacceptable work/Failure. Student performance is unacceptably low level of knowledge and understanding of course subject matter. Course will not count toward degree. Student may continue in program only with permission of the Dean.	
I	0.00	Incomplete is assigned when work is of passing quality but is incomplete for a pre-approved reason. Once an incomplete grade is assigned, it remains on student's permanent record until a grade is awarded.	
W	0.00	Withdrew from the course with Dean's permission beyond the second week of the term.	

- o All courses will be recorded and maintained in the student's permanent academic record; only courses that apply towards the degree will appear on the academic transcript. Non-credit or audited courses will not appear on the transcript.
- o 4 core courses taken for a letter grade (pass = A or B for a core course)
- o 2 elective courses taken pass/fail (pass = A, B, C for an elective)
- o Because students are encouraged to take electives outside their area of expertise, a "C" letter grade is passing.
- o Grading will be based on general attendance/participation, student presentations of the classic and contemporary publications, and

# Course Schedule

Date	Type	Topic or Lecture Title	Presenter Last Name	Presenter First Name	Presenter Department	Presenter Mail	Presenter Phone	Presenter Email	Organization Name (non-TSRI personnel)
09/04/2018	Lecture	Introduction to Entrepreneurship: Idea vs. Opportunity	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu	
			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu	
09/11/2018	Lecture	Market Analysis	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu	
			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu	
09/18/2018	Lecture	Business Model Canvas: Introduction	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu	
			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu	
09/25/2018	Lecture	Business Model Canvas: Application (including quiz #1)	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu	
			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu	
10/02/2018	Lecture	Business Plan Fundamentals	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu	
			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu	
10/09/2018	Lecture	Financial Strength and Viability	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu	
			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu	
10/16/2018	No Class	Graduate Student Symposium							
10/23/2018	Lecture	Business Plan Application	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu	
			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu	
10/30/2018	Lecture	The Intersection of Business, Law, and Technology (including quiz #2)	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu	
			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu	
11/06/2018	Lecture	Art of the Pitch I	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu	

			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu
11/13/2018	Lecture	Art of the Pitch II (including quiz #3)	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu
			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu
11/20/2018	Exam	Shark Tank	Catron	Daniel	Office of Technology Development	TPC-9	(858) 784-9388	dcatron@scripps.edu
			Goebel	Peter	Office of Technology Development	TPC-9	(858) 784-8721	pgoebel@scripps.edu