

**University of North Texas at Dallas**  
**Spring 2016**  
**SYLLABUS**

<b>BIOL 5315: Teaching Secondary Biology for Dual Credit</b>		<b>3Hrs</b>
<b>Department of</b>	<b>Health and Life Sciences</b>	<b>Division of</b>
		<b>Liberal Arts and Sciences</b>
<b>Instructor Name:</b>	Dr. Kelly Varga	
<b>Office Location:</b>	DAL2 249	
<b>Office Phone:</b>	972-338-1529	
<b>Email Address:</b>	kelly.varga@untDallas.edu	
<b>Office Hours:</b>	<b>Tuesday/Thursday- 1:00-2:30</b> <b>Wednesday- 1:00-2:30</b>	
<b>Virtual Office Hours:</b>	N/A	
<b>Classroom Location:</b>	DAL 2 307	
<b>Class Meeting Days &amp; Times:</b>	<b>Mondays 5:30-8:20 P.M.</b>	
<b>Course Catalog Description:</b>	A review of the pedagogy and practice of secondary biology teaching including course planning, lecture preparation, and assessments. An understanding and incorporation of current biological literature will also accompany a review of the undergraduate biology curriculum.	
<b>Prerequisites:</b>	None	
<b>Co-requisites:</b>		
<b>Required Texts (2):</b>	<i>Scientific Teaching</i> , Jo Handelsman, Sarah Miller, Christine Pfund; and <i>Campbell Biology</i> ; Reece, Urray, Cain , etc.; 10 <sup>th</sup> ed.	
<b>Recommended Text and References:</b>		
<b>Access to Learning Resources:</b>	UNT Dallas Library: phone: (972) 338-1616; web: <a href="http://www.untDallas.edu/our-campus/library">http://www.untDallas.edu/our-campus/library</a> UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: <a href="mailto:1012mgr@fheg.follett.com">1012mgr@fheg.follett.com</a>	
<b>Course Goals or Overview:</b>	We will review the mechanics, pedagogy and basic curriculum of a dual credit general biology course.	
<b>Student Learning Objectives:</b>		
1	Understand how high school and college level expectations and pedagogy differ.	
2	Develop skills in syllabus, schedule and curriculum preparation at the college level.	
3	Develop skills in scientific writing.	
4	Practice and demonstrate competence of locating and analyzing current biological literature and research.	
5	Demonstrate mastery of basic biology curricula including evolution, diversity, ecology and the overarching themes in general biology.	

## Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated in class and/or via Blackboard.

ST=Scientific Teaching

CB = Campbell's Biology

Color backgrounds- **Yellow** =tests

**Blue** = important information

**Pink**= readings that will need to be completed PRIOR to class as we will use that information for our Workshops.

**Green**= final exam/final project due

ST Reading Assignment	CB Reading Assignment	Timeline	Other Deadlines
Foreword; Chapter 1: Scientific Teaching pgs 1-13	Chapter 1: Evolution, the Themes of Biology and Scientific inquiry	Week of 1/25/16	
Chapter 1: Scientific Teaching ps 13-22, Chapter 2: Active learning, pg 23-32	Chapter 14 & 15: Mendel and the chromosomal pattern of inheritance	Week of 2/1/16	
Chapter 2: Active learning, pgs 33-46	Chapter 17: Gene Expression	Week of 2/8/16	JAR 1
Chapter 3: Assessment, pgs 47- 55	Chapter 22: Decent with Modification	Week of 2/15/16	
<b>EXAM 1</b>		<b>Week of 2/22/16</b>	
Chapter 3: Assessment, pgs 56-64	Chapter 24 & 26 The Origin of the Species/ Phylogeny and the Tree of life	Week of 3/7/16	SIN 1
<b>Chapter 4: Diversity, pgs 65- 82</b>	<b>Re read through chapters 24 &amp; 26</b>	<b>Week 3/14/16</b>	<b>NO CLASSES SPRING BREAK</b>
Chapter 5: A framework for constructing a teachable unit, pgs 83-100	Chapter 29 & 30: Plant diversity	Week of 3/21/16	JAR 2
Chapter 6: Institutional Effectiveness, pgs 101-106	<b>Chapter 31: Fungi</b>	Week of 3/28/16	
Workshop I: Scientific Teaching- in class			
Workshop II: Active Learning- in class	<b>Chapter 32: An introduction of Animal Diversity</b>	Week of 4/4/16	SIN 2
<b>EXAM 2</b>		<b>Week of 4/11/16</b>	
Workshop III: Assessments- in class	<b>Chapter 33: An introduction into invertebrates</b>	Week of 4/18/16	
Workshop IV: Diversity- in class	<b>Chapter 34: The origin and evolution of the vertebrates</b>	Week of 4/25/16	Draft project
Workshop V: Institutional Transformation		Week of 5/2/16	
<b>Exam 3 Final Exam</b>	<b>Week of 5/9/16</b>		<b>Final Project</b>

## Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

**Exams** – Each exam will be a combination of scantron and essay questions.

**Journal Article Reviews** – a synthetic summary and review of a recently published journal article following the guidelines provided in the grading rubric.

**Science in the News**– a written or oral review of a recent article in the news (approved sources only)

**Project Draft/Final** – individual students will work on a module for a college level biology course including lecture, active learning techniques, assessment and connected laboratory activities. Topics will be assigned and projects will be graded according to the published rubric.

### Grading Matrix:

Instrument	Value (points or percentages)	Total
Exams	3 exams @ 100 pts ea	300
Journal Article Reviews	2 @ 25 pts ea	50
Science in the News	2 @ 25 pts ea	50
Project Draft	50	30
Project Final	50	100
Class Participation/ Discussion	120	120
<b>Total:</b>		<b>650</b>

### Grade Determination:

A = 650 – 585 pts; i.e. 90% or better

B = 584 – 520 pts; i.e. 80 – 89 %

C = 519 -- 455 pts; i.e. 70 – 79 %

D = 454 – 390 pts; i.e. 60 – 69 %

F = 389 pts or below; i.e. less than 60%

## University Policies and Procedures

### Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or call Laura Smith at 972-780-3632.

### Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my course and I consider the SETE to be an important part of your participation in this class.

### Assignment Policy:

All assignment are due at the start of class with no partial credit given for late submission. Unless otherwise indicated, all assignments are due in hard copy and may not be emailed for credit. The only extra credit points given are for the 4 provided case studies.

### Exam Policy:

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

### Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of

Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at <http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs.%20Education.%20and%20Funding/7.002%20Code%20of%20Academic%20Integrity.pdf> for complete provisions of this code.

In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:

**On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.**

**Bad Weather Policy:**

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website [www.unt.edu/dallas](http://www.unt.edu/dallas). Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

**Attendance and Participation Policy:**

The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class during an excused absence. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Students are expected to arrive on time for class and roll at the designated time. Being tardy or absent will affect the points earned for attendance and thus your overall grade.

**Diversity/Tolerance Policy:**

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.

**General Behavior:**

Students are expected to conduct themselves in a professional and appropriate manner. You should expect to be silent when others are speaking, give your full attention to the professor or speaker, and refrain from reading newspapers or other distracting materials during class time.

Tobacco products of any kind are not permitted in the classroom.

Cell phones should always be on silent during class time.

Laptops and tablets may be approved for use in class for note taking on a provisional case-by-case basis.

Food is not permitted in the classroom although drinks are allowed as long as they are in a closed lid container.