

# **BIOL 5001: Teaching and Learning in the Life Sciences**

## **Spring 2018**

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Office Hours: M 9:30-10:30am, Th 3-4pm, or by appointment.

Course meets alternate Thursdays, 11am-12:50pm, SSB 207A

- Scheduled meetings this semester are: Jan. 11 & 25, Feb. 8 & 22, Mar. 15 & 29, Apr. 12 & 26

### **COURSE DESCRIPTION**

This course is designed to help you become more confident and reflective teachers by expanding both your knowledge and skills regarding teaching and learning. The instructors will model a variety of teaching strategies as we discuss and reflecting upon educational theory and practice. By combining action and analysis, you will have a chance to explore and develop teaching skills that promote learning within a diverse student body and across a variety of settings. Throughout this process, we will discuss the ways in which teaching choices grow out of beliefs and experiences (culturally and individually held) and how those choices influence students' learning.

Overall, I hope this will make your teaching practice more productive. Within this environment, you can explore assumptions, gain an understanding of the importance of reflective teaching practice, raise your awareness of the elements of course and curriculum design, and increase your appreciation of the idea that teaching and learning are interdependent activities shaped by teachers and students together.

### **COURSE GOALS:**

By the end of the course, participants will:

1. Gain comfort and confidence with regard to teaching skills
2. Analyze and manage classroom environments in relation to student learning and instructor teaching styles
3. Demonstrate knowledge of active learning theory and practice by applying active learning strategies in a classroom setting
4. Experience how educational technology enhances or detracts from student learning.

### **STUDENT LEARNING OUTCOMES (SLOs):**

At the end of this course, students should be able to:

1. Articulate strategies for helping students learn basic principles of biology and how to communicate their results and knowledge.
2. Construct, apply, and interpret the results of both formative and summative assessment tools that measure student learning and teaching effectiveness.
3. Demonstrate knowledge of active learning theory and practice by applying active learning strategies in their courses.
4. Analyze and manage classroom environments in relation to student learning and instructor teaching styles.
5. Use educational technology in ways that enhance student learning.
6. Articulate a philosophy of teaching that synthesizes and illustrates SLOs 1-5.

## CANVAS

Readings and homework assignments, supplementary materials, and course information will all be posted on the course Canvas site. Be sure to customize your **Canvas notifications** preferences to receive immediate ("notify me right away") notifications of messages and announcements.

## GRADING

This course is graded S-N. Grades are based on attendance, preparedness, and participation, and finishing other course assignments such as your Teaching Statement. (SLOs 1-6)

## GENERAL COURSE REQUIREMENTS

- Class Participation and Discussion: Because an active dialogue is central to the learning process, you are encouraged to ask questions and offer insights and information during the workshops. Coming to class prepared is essential to be an active participant.
- Completion of a Teaching Statement: Details to follow.

## COURSE POLICIES

**Attendance and Participation**: Due to the interactive and participatory nature of these workshops (sessions exercises and small group activities), attendance in all sessions is expected. You will learn as a great deal from each other. Should you need to miss a session, be sure to notify the instructor in advance; a make-up assignment will be given. The University's policy on excused absences can be found at: <http://d.umn.edu/academic-affairs/academic-policies/classroom-policies/e...>

**Withdrawing from this class**: Withdrawals after the 2nd week of classes will result in a "W" on your transcript. Withdrawals after the 10th week of classes are not allowed except by petition to your college based upon extenuating circumstances. More information, including specific dates, is available in your catalog and at: <http://www.d.umn.edu/onestop/calendar/cancel-add-refund-dates/index.html>.

**Teaching & Learning: Instructor and Student Responsibilities**: UMD is committed to providing a positive, safe, and inclusive place for all who study and work here. Instructors and students have mutual responsibility to insure that the environment in all of these settings supports teaching and learning, is respectful of the rights and freedoms of all members, and promotes a civil and open exchange of ideas. To reference the full policy please see: <http://d.umn.edu/academic-affairs/academic-policies/classroom-policies/i...>

**Student Conduct**: The instructor will enforce and students are expected to follow the University's Student Conduct Code ([https://regents.umn.edu/sites/regents.umn.edu/files/policies/Student\\_Con...](https://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Con...)). Appropriate classroom conduct promotes an environment of academic achievement and integrity. Disruptive classroom behavior that substantially or repeatedly interrupts either the instructor's ability to teach, or student learning, is prohibited. Disruptive behavior includes inappropriate use of technology in the classroom. Examples include ringing cell phones, text messaging, watching videos, playing computer games, emailing, or surfing the Internet on your computer instead of note-taking or other instructor-sanctioned activities. Although you may think that you are not affecting others, these activities are a distraction to the instructor and to your peers, and detract from a positive learning environment.

**Academic Integrity**: Academic dishonesty tarnishes UMD's reputation and discredits the accomplishments of students. Academic dishonesty is regarded as a serious offense by all members of the academic community. UMD's Student Academic Integrity Policy can be found at: <http://d.umn.edu/academic-affairs/academic-policies/classroom-policies/s...> This policy sanctions students engaging in academic dishonesty with penalties up to and including expulsion from the university for repeat offenders. The Department of Biology's policy is that instances of plagiarism will result in a score of zero on that assignment *and* a letter-grade reduction in the final course grade for all parties involved.

**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. For additional information, please see: <http://d.umn.edu/academic-affairs/academic-policies/classroom-policies/c...>

**Access for students with disabilities:** It is the policy and practice of the University of Minnesota Duluth to create inclusive learning environments for all students, including students with disabilities. If there are aspects of this course that result in barriers to your inclusion or your ability to meet course requirements such as time limited exams, inaccessible web content, or the use of non-captioned videos, please notify the instructor as soon as possible. You are also encouraged to contact the Office of Disability Resources to discuss and arrange reasonable accommodations. Call 218-726-6130 or visit the Disability Resources web site at <https://umd-general.umn.edu/disability-resources> for more information.

### **Course Schedule (Tentative)**

#### **#1: Starting off on the Right Foot / Teaching and Learning in the Sciences**

*Jan. 11 Th 11:00am - 12:50 pm SSB 207A*

#### **#2: Brain-Based Learning /Teaching Philosophies**

*Jan. 25 Th 11:00am - 12:50pm SSB 207A*

#### **#3: Classroom Climate**

*Feb. 8 Th 11:00am - 12:50pm SSB 207A*

#### **#4: Using Active and Cooperative Learning Strategies**

*Feb. 22 Th 11:00am - 12:50pm SSB 207A*

#### **#5: Shrinking the Large Classroom and Leading Discussions**

*Mar. 15 Th 11:00am - 12:50pm SSB 207A*

#### **#6: Student, Instructor, and Course Assessment**

*Mar. 29 Th 11:00am - 12:50pm SSB 207A*

#### **#7: Primary Literature in the Classroom / Technology in the Classroom**

*Apr. 12 Th 11:00am - 12:50pm SSB 207A*

#### **#8: Practical Matters and Wrapping Up**

*Apr. 26 Th 11:00am - 12:50pm SSB 207A*