



## Current Topics in BPG Course

The University of Toledo  
(Department of medicine, and BPG Program) \*  
(Alexei Fedorov & Rammohan Shukla Course Registration Number: 45061 - BIPG 5300 - 001)\*

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<b>Instructor:</b>	Alexei Fedorov & Rammohan Shukla	<b>Course Website:</b>	<a href="#">Blackboard Learn</a> (if applicable)
<b>Email:</b>	<a href="mailto:Alexei.fedorov@utoledo.edu">Alexei.fedorov@utoledo.edu</a> & <a href="mailto:Rammohan.shukla@utoledo.edu">Rammohan.shukla@utoledo.edu</a>	<b>Class Location:</b>	Blackboard collaborate ultra
<b>Office Hours:</b>	(Wednesday 1-2pm, rm 308 HSB)*	<b>Class Day/Time:</b>	Wednesday 2 to 3 pm
<b>Office Location:</b>	(rm 308, Health Science Building)*	<b>Lab Location:</b>	Blackboard collaborate ultra
<b>Instructor Phone:</b>	(419-383-5270)*	<b>Lab Day/Time:</b>	Wednesday 2 to 3 pm
<b>Offered:</b>	(Fall 2021)*	<b>Credit Hours:</b>	(1 credit)*

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### SPECIAL COURSE EXPECTATIONS DURING COVID-19

Maintaining a safe campus during the ongoing COVID-19 pandemic remains a top priority. UToledo continues to follow the guidance of the U.S. Centers for Disease Control and Prevention and Ohio Department of Health to keep our campus safe.

#### ATTENDANCE

The University of Toledo has a missed class policy. It is important that students and instructors discuss attendance requirements for the course. Before coming to campus each day, students should take their temperature and complete a self-assessment for symptoms of COVID-19, such as cough, chills, fatigue or shortness of breath. Anyone with a temperature at or above 100.0 degrees Fahrenheit or who is experiencing symptoms consistent with COVID-19 should not come to campus and contact their primary care physician or the University Health Center at 419.530.5549. For more information on the symptoms of COVID-19, please go to <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html> COVID-19 testing for sick students is available on both Main Campus and Health Science Campus. Call 419.383.4545 for an appointment. Absences due to COVID-19 quarantine or isolation requirements **are** considered excused absences. Students should notify their instructors and follow the protocols summarized in this document on [Navigating COVID-Related Course Concerns](#).

In the event that you have tested positive for COVID-19 or have been diagnosed as a probable case, please review the [CDC guidance](#) on self-isolation and symptom monitoring, and report the disclosure to the Division of Student Affairs by emailing [StudentAffairs@utoledo.edu](mailto:StudentAffairs@utoledo.edu) or by connecting with their on-call representative at 419.343.9946. Disclosure is voluntary and will only be shared on a need to know basis with staff such as in the Office of Student Advocacy and Support, The Office of Residence Life, and/or the Office of Accessibility and Disability Resources to coordinate supportive measures and meet contact tracing requirements.

#### FACE COVERINGS

Face coverings are required while on campus, except while eating, alone in an enclosed space, or outdoors practicing social distancing. Students will not be permitted in class without a face covering. If you have a medical reason preventing you from wearing a face covering due to a health condition deemed high-risk by the CDC, submit an [online application](#) to request an accommodation through the Office of Accessibility and Disability Resources. Students will need to provide documentation that verifies their health condition



or disability and supports the need for accommodations. Students already affiliated with the Office of Accessibility and Disability Resources who would like to request additional accommodations due to the impact of COVID-19, should contact their accessibility specialist to discuss their specific needs. You may connect with the office by calling 419.530.4981 or sending an email to [StudentDisability@utoledo.edu](mailto:StudentDisability@utoledo.edu).

## **VACCINATION**

Doctors and other health care professionals agree that the best way to protect ourselves and each other is to get vaccinated. Case data clearly show that vaccines remain highly effective at preventing serious illness from COVID, including the highly contagious delta variant. If you have not yet received your COVID vaccine, the University encourages you do so as soon as possible. No appointment is needed to get the shot at the UTMC Outpatient Pharmacy, University Health Clinic or Main Campus Pharmacy. Once you receive the COVID vaccination, please register on the COVID Vaccine Registry site at: <https://utvaccinereg.utoledo.edu/>.

## **SPECIAL NOTES**

It's important to note, that based on the unpredictability of the COVID-19 virus, things can change at any time. So please be patient and understanding as we move through the semester. I also ask that you keep me informed of concerns you may have about class, completing course work/assignments timely and/or health concerns related to COVID.

## **CATALOG/COURSE DESCRIPTION**

In-depth analysis of original scientific papers/seminars in the fields of bioinformatics, proteomics, and genomics for the development of critical analysis and scientific communication skills. May be repeated for credit.

## **COURSE OVERVIEW/ TEACHING METHODOLOGY**

In this course of the BPG program, students will be familiarized how to critically interpret and present materials, concepts, and implications from the scientific literature. Every meeting one paper will be analyzed and discussed. One student should be main presenters for a paper in each class. The order of presentation will be determine alphabetically based on the student's name. They should prepare a PowerPoint presentation detailing the background (rational of the paper), material and methods, results, and discussion. Each student (other than the presenter) must ask at least 2 questions about this paper and create a short list of Pros and Cons about this article. A general discussion is expected after the presentation, during which students are encouraged to critically appraise the paper and develop their own independent criticisms.

Each student will be required to present one paper of their choice; however, the paper selected should be from a reputed journal (or with an impact factor > 6) published within couple of months.

## **STUDENT LEARNING OUTCOMES**

Students will be familiar with most recent data, analysis pipeline as well as scientific writing and methodologies. They will also learn how to critically interpret and present materials, concepts, and implications from the scientific literature, as well as how to conduct independent research.

## **PREREQUISITES AND COREQUISITES**

There is no prerequisites or co-requisites for the course.



## TEXTS AND ANCILLARY MATERIALS

The paper chosen by the presenter should be emailed to the class (and instructors) at the earliest opportunity, preferably two days before the event.

## TECHNOLOGY REQUIREMENTS

Blackboard-collaborate ultra, internet browser, power point

## ACADEMIC POLICIES

Please read the following links for details:

[Undergraduate Policies](http://www.utoledo.edu/policies/academic/undergraduate/): <http://www.utoledo.edu/policies/academic/undergraduate/>

[Graduate Policies](http://www.utoledo.edu/policies/academic/graduate/): <http://www.utoledo.edu/policies/academic/graduate/>

## COURSE EXPECTATIONS

- Attendance in class. The UT missed class policy: <http://www.utoledo.edu/policy/index.asp?id=87>
- Participation in class discussion
- No use of mobile device during class
- Video camera should be ON during the class
- Disruptive behavior in the lecture room will not be tolerated. Please do not bring food during the class, although a drink is acceptable.
- Please read the UT policies on student conduct and academic dishonesty located at: <http://www.utoledo.edu/policy/index.asp?id=235>.
- Students are expected to check their UT email account frequently for important course information.

## OVERVIEW OF COURSE GRADE ASSIGNMENT\*

**Choice of paper for presentation: 20%** (date of publication and impact factor will be considered)

**Presentation Quality: 50%** (Consideration will be given to the extent to which the paper is comprehended and presented)

**Seminar activity: 30%** (Questions asked and participation by the students (non-presenters) will be considered)

## UNIVERSITY POLICIES

### **Institutional Classroom Attendance Policy (Fall and Spring FULL TERM ONLY Statement)**

Please be aware that the university has implemented an attendance policy, which requires faculty to verify student participation in every class a student is registered at the start of each new semester/course. For this course, if you have not attended/participated in class (completed any course activities or assignments) within the first 14 days, I am required by federal law to report you as not attended. Unfortunately, not attending/participating in class impacts your eligibility to receive financial aid, so it is VERY important that you attend class and complete course work in these first two weeks. Please contact me as soon as possible to discuss options and/or possible accommodations if you have any difficulty completing assignments within the first two weeks.



**Policy Statement on Non-Discrimination on the Basis of Disability (ADA)** The University is an equal opportunity educational institution. Please read [The University's Policy Statement on Nondiscrimination on the Basis of Disability Americans with Disability Act Compliance](#). Students can find this policy along with other university policies listed by audience on the [University Policy webpage](#) (<http://www.utoledo.edu/policies/audience.html/#students>).

**Academic Accommodations:** The University of Toledo embraces the inclusion of students with disabilities. We are committed to ensuring equal opportunity and seamless access for full participation in all courses. For students who have an Accommodations Memo from the Office of Accessibility and Disability Resources, I invite you to correspond with me as soon as possible so that we can communicate confidentially about implementing accommodations in this course.

For students who have not established accommodations with the Office of Accessibility and Disability Resources and are experiencing disability access barriers or are interested in a referral to health care resources for a potential disability, please connect with the office by calling 419.530.4981 or sending an email to [StudentDisability@utoledo.edu](mailto:StudentDisability@utoledo.edu).

### ACADEMIC AND SUPPORT SERVICES

Please follow this link to view a comprehensive list of [Student Academic and Support Services](#) (<http://www.utoledo.edu/studentaffairs/departments.html>) available to you as a student

### SAFETY AND HEALTH SERVICES FOR UT STUDENTS

Please use the following link to view a comprehensive list [Campus Health and Safety Services](#) available to you as a student.

### INCLUSIVE CLASSROOM STATEMENT

In this class, we will work together to develop a learning community that is inclusive and respectful. Our diversity may be reflected by differences in race, culture, age, religion, sexual orientation, gender identity/expression, socioeconomic background, and a myriad of other social identities and life experiences. We will encourage and appreciate expressions of different ideas, opinions, and beliefs so that conversations and interactions that could potentially be divisive turn, instead, into opportunities for intellectual and personal development.

### COURSE SCHEDULE

WEEK	DATES	TOPIC	LEARNING OUTCOME(S)	ASSIGNMENTS DUE
1	Sept 01	Paper#1 by E. Bates		
2	Sept 08	Paper#2 by K. Helminiak		
3	Sept 15	Paper#3 by A. Joyce		
4	Sept 22	Paper#4 by V. Reddy		
5	Sept 29	Paper#5 by W. Ryan		
6	Oct 06	Paper#6 by E. Shedroff		
7	Oct 13	Paper#7 by L. Stevenson		
8	Oct 20	Paper#8 by G. Vento		
9	Oct 27	Paper#9 by E. Bates		
10	Nov 03	Paper#10 by K. Helminiak		
11	Nov 10	Paper#11 by A. Joyce		
12	Nov 17	Paper#12 by V. Reddy		
13	Nov 24	Paper#13 by W. Ryan		
14	Dec 01	Paper#14 by E. Shedroff		



<b>WEEK</b>	<b>DATES</b>	<b>TOPIC</b>	<b>LEARNING OUTCOME(S)</b>	<b>ASSIGNMENTS DUE</b>
15	Dec 08	Paper#5 by L. Stevenson & G. Vento		