Mathematics, Statistics, and Data Science
Covid-19 Contingency Plan
March 2020

The following information outlines steps Mathematics, Statistics, and Data Science departments have implemented

1. Mathematics is well positioned to transition to remote instruction since most of our courses are already online. Of our many courses, we have only one course which is not yet online but then there are only two sections of that course collegewide. We have many math faculty members who are expert at online course delivery and who have agreed to be leads for the transition to remote instruction:

Course	Faculty Leads	Email
MATH 045/050	Julie Rogers	julie.rogers2@montgomerycollege.edu
	Andrea Steelman	andrea.steelman@montgomerycollege.edu
MATH 092	Sirisha Kolluru	sirisha.kolluru@montgomerycollege.edu
	Amit Trehan	amit.trehan@montgomerycollege.edu
MATH 098	Sirisha Kolluru	sirisha.kolluru@montgomerycollege.edu
MATH 017/117	Brian Kotz	brian.kotz@montgomerycollege.edu
	Ram Subedi	ram.subedi@montgomerycollege.edu
MATH 020/120	Bill Witte	bill.witte@montgomerycollege.edu
MATH 130/131/132	Latifa Barnett	latifa.barnett@montgomerycollege.edu
	Kim Fouche	kimberly.fouche@montgomerycollege.edu
MATH 150	Elaine Jadacki	elaine.jadacki@montgomerycollege.edu
MATH 165	Robert Kuhar	robert.kuhar@montgomerycollege.edu
	Andrea Steelman	andrea.steelman@montgomerycollege.edu
MATH 181/182	Jason Lee	jason.lee@montgomerycollege.edu
	Mary Wall	mary.wall@montgomerycollege.edu
MATH 280	Stephen Wheatley	stephen.wheatley@montgomerycollege.edu
MATH 282	Atul Roy	atul.roy@montgomerycollege.edu
MATH 284	Mary Wall	mary.wall@montgomerycollege.edu

In addition, for each of our courses, there is a standing workgroup of faculty who act as a resource for that course. In most of these course workgroups there are multiple members who have extensive experience with remote instruction (bolded in the membership lists included on page 3). There is also at least one member on each campus. We will prioritize communication to faculty to ensure that everyone knows whom to contact for content related questions relevant to the transitioning of their course(s). Several leads have already

been proactive in reaching out to the entire faculty teaching a section of their assigned course.

2. Most of our courses already have Bb communities and in some instances, these communities make online resources available to community members. Our faculty will work to expand these already existing collections of resources so that there is more that is relevant to remote instruction. We will also make sure instructors know about these resources and how they can gain access.

3. We have computer labs that can potentially be made available for student use:

   Germantown   HT205
   Rockville   SC251 (A/B), SC317 (A/B)
   Takoma Park

4. We are currently offering four sections of data science classes. Our data science coordinator reports that all four instructors have indicated that they are comfortable and confident with the transition to remote instruction.

Course	Faculty Leads	Email
DATA 101	Celia Evans	celia.evans@montgomerycollege.edu
	Michael Iapalucci	miapalu1@montgomerycollege.edu
DATA 201	Abdirisak Mohamed	abdirisak.mohamed@montgomerycollege.edu
DATA 205	John Hamman	john.hamman@montgomerycollege.edu

5. Potential Barriers/Issues:

   - Part-time faculty – particularly those who teach at night or on the weekends – will not have the same level of access to resources that can aid them in adjusting their course delivery. As many of these faculty members have full-time jobs in addition to their work at MC, they will also not have the same amount of time available to them.
   - Ensuring that faculty make appropriate adjustments to their syllabi will be a challenge.
   - If we cannot require students to come to campus, then test security and consequently maintaining rigor in our courses will be an issue. Especially if this situation extends beyond the end of March.
   - Reliance on the assessment centers for testing would also pose significant challenges.
   - Accessibility and ensuring that students have their DSS accommodations needs met is an issue.

Appendix A

Cybersecurity
Tasks Accomplished Thus Far:
- The Cybersecurity Coordinator and Lead Instructors have collaborated to develop the plan listed to ensure student success through the end of March.
- We would like to establish a global email address (e.g., cyberadvising@montgomerycollege.edu) so students can ask questions not only specific to advising but about anything regarding their courses.
- We have reviewed the aspects of Virtual Proctoring through SmartProctoring so exams can be administered as appropriate. Any exams that require hands-on will be addressed by each instructor and will include detailed instructions to students for completion and submission.
- We have reviewed the Collaborate tool to assist with faculty and tutor availability each day and time in which a course meets.
- We would like to establish a BB shell for the Linux Tutor so that this resource can still be available to students who may need it.
- We would like to request Racktop access for students who are taking courses in Germantown so that they have a virtual environment to run the labs that faculty will provide. Students will request access based on need.

Staffing

- All Cybersecurity instructors and the Linux Tutor will maintain the same schedule they currently have through Collaborate. All will be available each day and time in which the course meets, during office hours, and during tutoring hours.

Action Plan

- Request creation of the cyberadvising@montgomerycollege.edu email address.
- Develop a generic statement to be posted on the Cybersecurity website directing students to address questions/concerns by emailing the cyberadvising@montgomerycollege.edu email address during this precautionary phase.
- Request creation of the BB shell for the Linux Tutor.
- Contact the Cybersecurity instructors and Linux Tutor regarding specific aspects of the contingency plan.
- Ensure that Cybersecurity faculty are adhering to the BB master sample outline provided at the beginning of each semester.
- Provide instructions for all Cybersecurity instructors and the Linux Tutor for Collaborate and implement it for each of their BB course sites.

- Provide Cybersecurity instructors POC information for SmartProctoring – Virtual Proctoring for exams to be administered.
- Faculty availability through Collaborate during the specific times in which the course meets to answer questions.
- Request that all faculty teaching the NWIT263 and NWIT275 sections to adjust their course schedules so that any lessons that require special hardware be addressed in April (or whichever date that is defined by the college).
- All instructors should update their BB Course Sessions on a weekly basis with all the pertinent material to include detailed instructions for labs, videos, demonstrations, etc.
- The Program Coordinator and Lead Instructors for each of the Cybersecurity course will provide support to other Cybersecurity instructors, as needed. Access to each of the BB courses should be provided to the Program Coordinator and Lead Instructor of a given course.
- Send a Cybersecurity-wide email to all students providing them with a summary of the information contained in this email but which focuses on: 1) Collaborate will be available each day and time in which the course meets as well as outlining when the plan will be in effect (i.e. after Spring break through the end of March, etc.); 2) Instructors will provide, via the Course Sessions, all detailed instructions for all labs a week in advance.
- All instructors will disseminate, via each of their BB course sites, the most up-to-date coronavirus information as it is provided by MC.

Additional Support Needed from the Collegewide Dean to ensure that:

- Approval of this contingency plan is granted.
- Each faculty member is adhering to this guideline by providing access to the Program Coordinator and Lead instructor access to their BB course by Thursday 3/13.
- Each faculty member provides in advance (at least a week prior) all labs with detailed steps and screenshots for students to complete.
- Approve Racktop access for each student (upon request) who are taking courses in Germantown so that they have a virtual environment to run the labs that faculty will provide.

Appendix B

AEBSCC Communication Strategies

Strategy	Description	Best For	Pros/Cons
Free Conference Call https://www.freeconferencecall.com/	Free conference call service allows for unlimited calling from any phone to an 800 number and access code assigned by the company. Use email to sign up. No need to schedule your meeting time as you get a personal line for multiple uses.	Useful for listening activities; reporting back on homework projects; assigning homework, general check-ins.	No/low tech option. Students need phone. Instructional activities limited. Takes more effort to keep everyone engaged. People can dial in from anywhere. Conference calls can also be held with Zoom. See below. Questions? Ask Donna.
Remind https://www.remind.com/	Free communication app, but a limit on the number of classes per account. No limit on the number of messages. 140 character limit. App available.	Communicating important announcements; text alerts	Low-tech option. Students need phone. Currently messages are sent by staff only. Questions? Ask Rabee or Jonathan.

Strategy	Description	Best For	Pros/Cons
Facebook https://www.facebook.com/	Social media application used around the world	Best for posting information Facebook Live feature could be of use Useful for practicing writing	Medium-tech option. Students need app. Must have account and signup for group In case of meeting online, ensure privacy settings are enable and show students how to do same App is easy to use Students may already be familiar with FB Questions? Ask Vathany
What's App https://www.whatsapp.com/	Cross platform messaging and voice over IP service owned by Facebook. Group chats, photos, doc sharing, video calls.	Message sharing, phone calls Appointments with small groups	Medium -tech option. Students need app. Questions? Ask Chauncy
Edmodo https://new.edmodo.com/?go2url=%2Fhome	Alternative to Blackboard frequently used in K-12. Send messages. Share materials.	LMS platform with multiple features	Medium tech option. Students need ap Our teachers have found it easier to use than Blackboard. Questions? Ask Alex

Strategy	Description	Best For	Pros/Cons
Schoolology https://www.schoology.com/	Alternative to Blackboard frequently used in K-12.	LMS platform with multiple features	Questions? Ask Megan
Zoom https://montgomerycollege.zoom.com Use MyMC user name and password	Video-conference system; can use just phone line for participants without a screen	Audiovisual activities (e.g. listening and speaking); presentations	High tech option. Students need app on phone or device or desktop. If students only have phone, they can dial in with just the number. File sharing is limited, but can post presentations, use the whiteboard during meeting. This is an institutional account, so use link to log in. A free personal account has more limits. (The College no longer uses GoTo Meeting.) Training is provided. Questions? Ask anybody

Strategy	Description	Best For	Pros/Cons
Edmentum	Alternative to Blackboard		High tech option. Students need user name and password to access.
			Currently used for Fast Track GED/Ipathways GED.
			Limited number of seats.
			Teacher training needed.
			Questions? Ask Rabee or Fetwi.

Strategy	Description	Best For	Pros/Cons
Blackboard Log on to Montgomery College website with MyMC user name and password and go to Blackboard	Online course management system available to all instructors at MC. WDCE instructors must request that a course be set up prior to use.	A range of instructional activities. Can upload files and docs for reading and writing and videos or presentations for listening/viewing.	High tech option. Students must log in using MyMC and will need support in advance on how to navigate Bb. Teachers may also need support on how to post docs and navigate; there is online training for basic functions. This is particularly important for instructors who have never used Bb or a similar system. For a full online course, a template from IT is required. Questions? Ask Emma or Nancy

Appendix C

Cengage Support

Cengage is here to provide support for classes and institutions impacted by the spread of the coronavirus. Please let me know how I can help.

As you may have seen, we are offering a suite of resources to educators who are looking to move courses online. We will be continually updating our COVID-19 Customer Support site (click on the Faculty button). Some of the resources, such as "Strategies for Quickly Transitioning to Online" can be used by anyone, using any product. Other resources are specific to using Cengage online platforms in virtual teaching.

If you need help setting up a course on a Cengage digital platform like MindTap or WebAssign, myself and my Digital Success Specialist are here to help! You can also access self-serve "how to" resources here.

If you are interested in free access to Cengage Unlimited for your students, here's how it works: we will be giving "rolling" trial access to students through the end of the term. Usually, students are allowed one 2-week trial to Cengage Unlimited per semester. Now, due to this unplanned, mid-semester disruption, we are enabling them to get as many trial accesses as they need. They should create an account with us (they only have to do this once) and sign up for "Start Free Trial." In two weeks, they will be told to renew the trial. It will take just a few minutes and they will be able to continually renew free access through end of this term.

1. **For students who have purchased Cengage Unlimited,** they can continue to use Cengage Unlimited with no interruption in service, and we will extend access as needed, based on the situation at your institution (i.e. more days are added to your spring semester). For these students, there is no action item at this time.

2. **For students who are not currently using Cengage Unlimited and have not otherwise activated a trial with us within the last 75 days**, they should go to www.cengage.com, create an account with us, and choose "Start Trial".

Please know that your entire Cengage team is standing by, ready to provide training and support and to answer any questions that may arise as you move your course online. Please don't hesitate to reach out!

Appendix D
Service Continuity Plan for Remote Instruction/Work
Academic Success Center (ASC) &
Writing, Reading, and Language Center (WRLC)

Tentative Timeline
- **3/16/20-3/19/20**: No student services offered so that we may have time to transition our services online
- **3/20/20**: Spring Break
- **3/23/20-4/3/20**: Implement e-tutoring to support remote student instruction

Tutoring
- Offer both asynchronous and synchronous e-tutoring options
- Post e-tutoring schedules on WCOnline
- Conduct synchronous e-tutoring via Zoom or Skype

WCOnline
- WRLCs to host STEM e-tutoring schedules.
- Each campus' WCOnline site will have dropdown schedules that correspond to their campus:
  - Takoma Park/Silver Spring: https://montgomerycollege.mywconline.net/
    - Academic Success Center-Hosted on GT WRLC's WCOnline site: https://montgomery.mywconline.net/
    - Writing, Read, & Lang Ctr
    - World Languages
    - Math Learning Center
    - Nursing & Health Sciences
    - Science Learning Center

Zoom or Skype
- Tutors need to create their Montgomery College Zoom account. Afterward, they will be able to send Zoom session links to students who request synchronous tutoring sessions.
- Tutors need to log in to Skype with their Montgomery College email.

Communication
- **Memo on Behalf of all Learning Centers to Students, Faculty, and Staff**
  - One memo on behalf of all learning centers should be sent to students, faculty, and staff, followed by information for each campus' unique learning centers. Memo to include underlined instructions for creating a WCOnline account and e-tutoring appointments.
- **All Learning Center Websites**
  - All learning center **websites** should display the same message:

- Per Montgomery College's Coronavirus Response Plan, all learning centers will provide remote instruction until further notice. Please visit our [virtual tutoring page to sign up for virtual tutoring.](#)
- **Virtual Tutoring Page**
  - https://www.montgomerycollege.edu/academics/support/learning-centers/virtual-tutoring.html
  - Students who visit learning center websites will be routed to the virtual tutoring page. This page links each learning center to its respective WCOnline site.
- **WCOnline**
  - All students who are currently registered for the TP/SS WCOnline will receive the memo and instructions for creating e-tutoring appointments.

Contact Information

- **ASC:** asc@montgomerycollege.edu
  - Jeff Chuang, Manager: jeff.chuang@montgomerycollege.edu
  - Angel Salinas Gonzalez, Instructional Associate: angel.salinasgonzalez@montgomerycollege.edu
- **WRLC:** wrlc.tpss.general@montgomerycollege.edu
  - Tanya Camp, Manager: tanya.camp@montgomerycollege.edu
  - Peg LaRocca, Administrative Aide: Margaret.larocca@montgomerycollege.edu
  - Karen Blinder, Instructional Associate: karen.blinder@montgomerycollege.edu
  - Sandra Grady, Instructional Associate: Sandra.grady@montgomerycollege.edu
  - Shaline Kirkland, Instructional Associate: shaline.kirkland@Montgomerycollege.edu
  - Jeremy Lignelli, Instructional Associate: Jeremy.Lignelli@montgomerycollege.edu
  - Mary Mowen, Instructional Associate: Mary.Mowen@montgomerycollege.edu

Appendix E
Signing up for E-Tutoring

The Rockville Writing, Reding, and Language Center is proud to offer e-tutoring for students. Please note that this tutoring is asynchronous, meaning that you will not speak with the tutor in real time, and you do not need to be available at the time of the appointment. Rather, you will upload your completed writing assignment, and the tutor will provide you written feedback by the end of the appointment. Keep in mind that this is not an editing service. However, the tutor may provide grammar feedback if necessary.

To sign up for e-tutoring, follow these steps.

1. Log in to WC Online: https://montgomery.mywconline.com (Note, this is **W**C Online, not MyMC).
2. If you have already registered, log in with your Montgomery College email address and the password you chose. Then proceed to step 8, on the other side of this page.
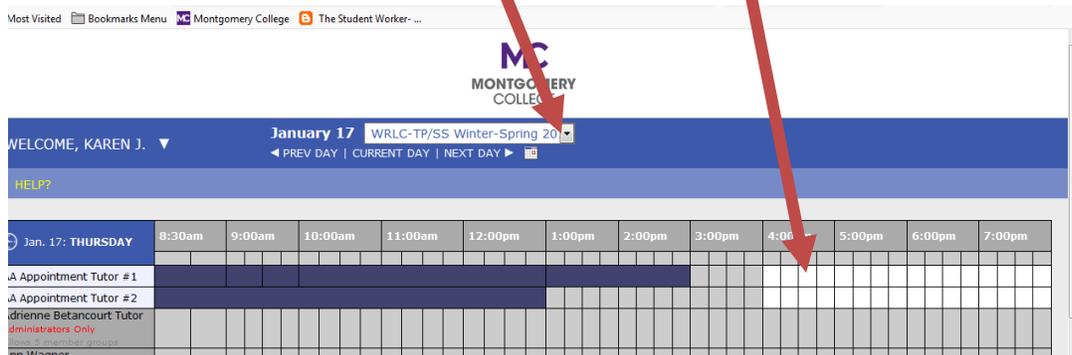3. If you have **not** registered before, click on the link that says "Register for an account."

4. Follow the prompts to register.
5. Important: Use your *Montgomery College* email when you register.

6. After you have filled in all of the required information, click on the submit button at the bottom of the page.
7. After you have registered, log in to WC Online. (Link in Step 1.)

8. Check that the drop-down menu shows "e-Tutoring Spring 2020." Change it if necessary.

9. Click on a white square to make an appointment for that hour. Follow the prompts.

A few notes:

- You can make an e-tutoring appointment up to 7 days in advance but may not have more than two appointments scheduled during that time frame.
- You must upload the instruction sheet and your assignment before your e-tutoring appointment.
- The tutor will provide feedback by the the end of your e-tutoring appointment by uploading a copy of your work with their comments included.
- Once the tutor uploads their comments, you will receive a message stating that your feedback is ready. You will then log in to WCOnline, open your e-tutoring appointment, and then download the tutor's document.
- Please email questions to writingcenter.rockville@montgomerycollege.edu, call **240-285-9042 or 240-230-7771.**

Appendix F

CBS Remote Teaching Workgroup

Workgroups have been established from the list of campus course coordinators. Coordinators oversee course offerings including the tasks below. Additionally, for each department, an online lead has been identified by the department chair. Although multiple faculty may teach online, the thought was to have a designated "buddy" to turn to if faculty encountered an online concern or problem. The online "buddy" by department are: CBS Germantown – **Kiersten Newtoff**, Rockville Chemistry- **Craig Benson**, Rockville Biology – **Victoria Schneider**, CBS TPSS – **Alex Micich**. They will be in contact with each other to discuss and document issues that may arise.

Workgroup Tasks for the Rest of the Semester:

1. Create Communication Strategy
   a. Determine how to communicate with the rest of the workgroup
   b. Create a communication strategy for:
      i. All course instructors (including online) particularly during this time of remote teaching and for the remainder of the semester.
      ii. To inform course faculty of answers to posed questions
2. Create and Maintain Common Course Outline to include:
   a. Required Textbook
   b. Required Technology
   c. Common Final & Review (if applicable)
   d. General Education course signature assignments
   e. Course Topics
3. Identify a clear student success strategy to ensure student engagement and success
4. Develop and suggest language for faculty to incorporate into their syllabi that addresses modifications that may have resulted with the move to remote teaching.
5. Recommend a plan to assess students during this period of remote teaching
6. Ensure that General Education course assessment and signature assignments are completed
7. Work with Learning Centers on each campus to keep them informed of changes
8. Work with the library to keep course pages updated

Course	TPSS Lead	RV Lead	GT Lead	Additional Members
BIOL 101	Alessandra Sagasti	Vedham Karpakakunjaram	James Smith	
BIOL 105	Sean Cooney	Tori Schneider	Kiersten Newtoff	

BIOL 106	Sean Cooney	Tori Schneider	Kiersten Newtoff	
BIOL 111		Esat Attikan		
BIOL 114		Shawn Lester		
BIOL 130	Alex Micich	Janet Norcross	Abdulai Barrie	
BIOL 131	Alex Micich		Abdulai Barrie	
BIOL 150	Sean Cooney	Evdokia Kastanos	Padma Tangirala	Antonio Del Castillo-Olivares
BIOL 151	Alessandra Sagasti	Gina Wesley	Kiersten Newtoff	
BIOL 202			Steve Tsang	
BIOL 210	Ijeoma Otigbuo	Michael Chase	Meg Birney	
BIOL 212	Nelson Bennett	Sara Kalifa	Janice Gallagher	Leah Allen
BIOL 213	Carole Wolin	Leah Allen	Satish Gupta	
BIOL 222	Linda Jurata	Michael Chase	Scot Magnotta	
BIOL 226	Jeff Chyatte		Jennifer Capparella	
BIOL 228	Alex Micich		Abdulai Barrie	
BIOL 230		Ishrat Rahman		
CHEM 099	Fotis Nifiatis	Thomas Chen	Don Newlin	
CHEM 109		Craig Benson		Nevart Tahmazian
CHEM 109L		Craig Benson		
CHEM 131	Aksana Chabatar	Craig Benson	Don Newlin	Fotis Nifiatis
CHEM 132	Aksana Chabatar	Patricia Takahara	Don Newlin	
CHEM 135		Abner Mintz		
CHEM 150	Solomon Teklai			
CHEM 203	Cory Newman	Rachel Ndonye	Don Newlin	
CHEM 204	Adel Halli	Sripriya Seetharaman	Don Newlin	
CHEM 272		Thomas Chen		
BIOT - All			Lori Kelman	

CBS is prepared to move forward with online or other forms of remote instruction beginning the 23rd of March. Faculty collegiality is high and all are motivated to make remote instruction meaningful to our students.