Instructor Information

Instructor: Rachel Caruthers  
Office: LRS 237  
Mailbox: LRS Faculty Offices  
Hours: Tues/Thurs 1:30pm – 4:00pm  
Phone: 501-812-2351  
Email: rcaruthers@uaptc.edu (Best and Fastest way to contact me!)

*All emails and telephone calls will receive a response within two business days.

Chair: Denise Hammett  
(501)812-2874  
denisehammett@uaptc.edu

Dean: Dr. Marico Bryant Howe  
(501)812-2342  
mbryanhowe@uaptc.edu

*If your emails and telephone calls do not receive a response within two business days, the appropriate chain of command is above.

Course Information

In Person

Instructor is physically in the classroom and delivering content in a face-to-face format for ALL meetings of the class. We may make use of computers, internet, or other electronic media in the classroom on any given day. Students may be directed to online material provided by the publisher, or to other internet accessible sources as part of their course work. Students may be expected to work in groups and to make project presentations.

Class Days and Meeting Times

Lecture – Tues/Thurs – LRS 217 – 6:00pm to 7:15pm

Catalog Description

3 Credit Hours (3 hours lecture per week)

Comprehensive mathematics course designed for general education core and for degrees not requiring College Algebra. The overarching goal of Mathematical Reasoning is to provide students with mathematical understandings and skills to be productive workers, discerning consumers, and informed citizens. Students will solve problems using mathematical reasoning involving logic, proportions, algebra, and relations. This course is designed to deliver instruction that focuses on process, conceptual understanding, communication and problem-solving found in the following strands: (a) Personal, state, and national finance (b) Statistics and probability (c) Mathematical modeling (d) Quantities and measurement. The course satisfies the state mandated requirement for the baccalaureate degree and is for students in courses of study not requiring College Algebra as a prerequisite. This course is not appropriate for STEM majors, such as Science, Technology, Engineering, and Mathematics.
A TI-83 or TI-84 graphing calculator is required for this course and the course requires an online learning component.

Students who fail to meet the prerequisite scores must enroll in MATH 0100 to enroll in MATH 1300 during the same semester.

Prerequisites:

• A minimum score of 18 on the Mathematics section of the ACT
• A minimum score of 77 on the Accuplacer Elementary Algebra Placement Test
• A minimum score of 33 on the COMPASS Algebra Placement Test
• Permission of the department chair or division dean

Course Materials

Required Materials:

MyLabsPlus Access Code ISBN: 9781323901892. (There is an e-text pre-loaded).  Or


Calculator: A TI-83 or 84 calculator is required for the course. No other brands of calculator will be supported and no Texas Instrument models other than 83’s and 84’s will be discussed. TI-89 and TI-Nspire models cannot be used.

(Please note, you do not need to purchase the physical textbook unless you prefer to have an actual book versus an e-text book which can be viewed in the MyLabsPlus software. So, you can purchase the MyLabsPlus Access Code listed above or you can purchase the actual book which comes with an Access Code. You will need the calculator mentioned above.)

If you have been awarded financial aid but have not received funds, you can take your schedule down to the UA-PTC bookstore and they will charge your books to your account. This will allow you to purchase your book early and will alleviate you getting behind this semester.

Free Tutoring is offered on both UA-PTC south and main campus. Information provided at http://www.uaptc.edu/footer-navigation/tutoring-center

MLP Technical Support: If you are unable to install the necessary software and plug-ins or the program is not running properly, you may contact the MyMathLab Student Support Line at: 1-800-677-6337 Monday-Friday, 12 pm to 8pm  (All times are Eastern Standard Time)

Do not contact the UA-PTC IT services department for assistance with MLP issues. Please be sure to contact the 1-800 number that was provided above.
**Student MyLabsPlus Access**

MyLabsPlus Web Address: [http://pulaskitech.mylabsplus.com/](http://pulaskitech.mylabsplus.com/) or you can also access the MLP link in UA-PTC’s Portal.

- **Student MyLabsPlus Username:** The first two letters of your first name, your entire last name, and the last four digits of your student ID.
  
  Your MLP Username: __________________________________________

- **Student MyLabsPlus Password**: Ptcmmdyyyy (this is the letters “Ptc” and your birthdate)
  
  Your MLP Password: __________________________________________

  *If you have previously used MLP with UAPTC, you will need to use that password instead.

Once you login into MyLabsPlus,

1. You will be prompted to accept the terms of the Pearson User License Agreement and Privacy Policy. Click **I Accept** once you have read the terms of use.
2. You will be prompted to enter the access code that you received with your book. **If you have already purchased the book, chose “Access Now”**.
3. If you do not have a code, you will choose “Pay Later”. This will give you **14 days of Temporary Access**, which will begin on the day you **registered** in the course. This means that the temporary code could expire at different times for each student since it is based upon the date each student registers into the system. You will need to purchase your book before the temporary access code expires or you will be locked out of MyLabsPlus and you will not have access to your work which could result in zeros on assignments that were missed. **DO NOT LOSE YOUR ACCESS CODE ONCE YOU HAVE PURCHASED IT. YOU WILL NOT BE ABLE TO ENTER IT UNTIL THE TEMPORARY ACCESS CODE EXPIRES.**

If you have trouble logging in, entering your code, or experience issues with not being able to access the course, please contact the Chair of the department. Her name is Denise Hammett and her email is dhammett@uaptc.edu. Please send as much information as you can about the situation including screen shots along with a good working phone number, your username and birthdate.

**Mission Statement**

University of Arkansas – Pulaski Technical College provides access to high-quality education that promotes student learning and enables individuals to develop to their fullest potential.

**Institutional Learning Outcomes and General Education**

UA-PTC supports a college-wide institutional learning assessment program which concerns effective instructional methods and promotes student learning achievement by assessing:
1. Communication
2. Critical Thinking
3. Cultural Awareness
4. Information Literacy
5. Professionalism
6. Quantitative Literacy
7. Technology Literacy

For more information, please consult the following website: https://uaptc.edu/sla

**Department / Program Learning Outcomes**

The Mathematics department, consistent with the College’s mission and the Division’s objectives, encourages the success of its students in all technical fields and academic disciplines by promoting:

1. Critical and mathematical thought
2. Academic Integrity
3. Independent thinking and learning
4. Quantitative and technological literacy on a collegiate level.

**Student Learning / Course Outcomes**

The overarching goal of Mathematical Reasoning is to provide students with mathematical understandings and skills to be productive workers, discerning consumers, and informed citizens. Students will solve problems using mathematical reasoning involving logic, proportions, algebra, and relations. More specifically, student performances will include:

1. Identifying problem-solving strategies and applying them to contemporary everyday problems, both in work and in personal lives.
2. Analyzing reports from media to determine completeness and accuracy noting assumptions both stated and unstated.
3. Critiquing public consumer and political information for better understanding, completeness, and accuracy.

In keeping with the tenets of student performance in a general education course, Mathematical Reasoning is designed to deliver instruction that focuses on process, conceptual understanding, communication and problem solving.
Policies

Report a Complaint or Concern

UA-PTC takes very seriously complaints and concerns regarding the institution. Most complaints or concerns of a specific nature should be initiated and resolved at the campus level through normal college processes whenever possible. UA - Pulaski Technical College receives and resolves complaints using a variety of methods. To report a complaint or concern, please follow the link below.

https://www.uaptc.edu/report-a-concern-complaint

UA-PTC Attendance Policy

Education at UA-PTC requires students’ active involvement in the learning process. Thus, students are expected to attend all classes and actively engage in all learning assignments and/or opportunities provided in their classes. Class attendance should be treated as mandatory by all students as attendance will be taken by all instructors during the first two weeks of class.

Departmental Attendance Policy

All students must sign the roster every day. This is a record of your presence and will be referred to if a discrepancy is found. Thus, if a student does not sign the attendance sheet s/he will be marked ‘absent’. Students are expected to stay the full class time, unless otherwise discussed and previously approved by the instructor.

Agencies granting financial assistance may be notified of the violation of the attendance policy by students receiving financial aid.

Attendance is taken starting the first day of the semester and throughout the semester, with the exception of students who enroll after classes have started. Teachers have the right to count students as absent if they arrive late to class, leave class early, or go in and out of the classroom during class time. Teachers have the right to lower a student’s grade based on excessive absences. Instructors set the attendance policy for courses and students’ must follow those policies.

Any student who does not attend class before the roster certification date will be considered a “no show” according to the campus attendance policy and will be reported as such and dropped from the class. Students who were dropped because they had not attended class, will not be allowed back into the course during that specific term; refunds are automatically added to the student’s account for being reported as Never Attending a class. Instructors set the policies for counting students as “no shows” in the online environment and it is the students’ responsibility to follow those policies to remain in the course.

Regular and consistent attendance should be maintained in order to be successful in this course. Excessive tardiness and/or absences are considered discourteous to the instructor and the learning environment and can be a detriment to successful course completion. More
importantly, students who are absent miss important information from lectures, class discussions, handouts and assessments, and can easily fall behind on the material. As mastery is a basis for progression, students will need to be present each day. Following an unavoidable absence, the student has the responsibility for completing all activities missed as allowed by the instructor.

If the student misses lecture, that student should get the missed material from a fellow student, go over it, then approach the instructor before/after class or during office hours to ask any questions concerning the missed material.

The instructor may also have scheduled class activities, tests, or quizzes for a set amount of time. If a student missed the beginning of such, the instructor is under no obligation to give them longer than the set amount of time the instructor scheduled.

**Drop Date:** The last day to drop a course or withdraw from the college is **Friday, November 16th**. A student should consult with their instructor and financial aid (if applicable) before submitting a drop form. A student can request to drop or withdraw by visiting the student services office on any campus or by submitting a written, faxed request. Faxed requests can be sent to (501) 812-2316 and must contain the student’s name and student ID number, a statement of which course you wish to drop or a statement that you are withdrawing from all courses, your signature, and a copy of your state-issued photo identification. Instructors do not have an administrative drop option.

**Course Policies**

The UA-PTC Catalog rules and regulations will be enforced in this course at all times.

Please consult the following website for more information: [https://www.uaptc.edu/catalog](https://www.uaptc.edu/catalog)

Professional behavior is required. Punctual attendance and intelligent participation are expected. Particulars as determined by the instructor are detailed in the paragraph below.

Appropriate behavior is expected for all communications, including any notes, email messages, or telephone conversations. Some guidelines for communication are included in this syllabus to help you.

**Email Policy:** Due to UA-PTC’s board policy and privacy issues, please only send emails from your Pulaski Technical College email account. UA-PTC employees (and students) can only receive and send official email through UA-Pulaski Technical College’s email accounts.

Students should include their first and last name, course ID (________________________), and purpose in the subject line of the email.

**Timely Response:** Instructors will normally answer emails and voice mails within 24 hours, except for weekends and times when the college is closed.

**Campus Visitors Policy:** Classrooms and laboratories are restricted to currently enrolled students only. Visitors are not allowed in any classroom or laboratory where a schedule course
is being taught. At no time are children allowed in the classroom during times when scheduled courses are being taught. Additionally, when it is necessary to bring children to campus, they may never be left unattended. At all times, children remain the sole responsibility of the parent.

**Incompletes:** The requirements for awarding a grade of incomplete, “I” can be found in the Academic Catalog.

**Math Department Chair:** Denise Hammett, dhammett@uaptc.edu. The department chair may be contacted as a next point of contact after an agreeable resolution has not been found through consultation with the instructor. The department chair will not overturn decisions made by the instructor based upon the policies or requirements of the syllabus.

**Cell Phones:** Please turn cell phones on vibrate mode during class time. Texting during class or doing other things on your phone or tablet or smart watch during class not related to the course is not a good idea as concepts being taught will be missed. No cell phone or other electronic devices (other than graphing calculator) can be used during tests.

**Group Work:** You will be expected to work with a small group of class peers; peer groups are to be determined by your instructor and may include peers who have similar degree plans or focus areas. Once these groups have been determined, you will be expected to sit in the classroom together as a group and be resources for each other inside and outside of the classroom (except for testing, final exam and other instances to be determined by the instructor). In life, there will be jobs or other instances where you must have the ability to work with others even if you would not normally do so or agree with them on a personal level. You will be expected to act respectfully and productively in your groups.

**Portfolio:** You will be expected to turn in a portfolio for each section of the class, for a total of 4 portfolios. Two project portfolios (Portfolio #1 and Portfolio #3) as well as two test portfolios (Portfolio #2 and Portfolio #4). The project portfolios will be part of your project grade and the test portfolios will be part of your test grade.

Test portfolios are to be turned in before class on the day of the test. Project portfolios are to be turned in directly after the presentation. Late submissions will be accepted but a penalty of 10% will be deducted per day after the due date.

Portfolio guidelines, rubrics, and checklists are available in Blackboard, MLP, and as handouts.

**Grading Policy**

Letter grades will be based on the following scale:

- 90 to 100% A
- 80 to 89% B
- 70 to 79% C
- 60 to 69% D
- 0 to 59% F
MR Homework: 15%
Support Homework: 15%
Projects: 30% (including portfolio & presentation)
Tests: 15%
Final Exam: 25% (Student will receive an F for the course for failure to take final exam).

Course Average will be calculated as follows:

\[(\text{MR Homework Avg } \times 0.15) + (\text{Support Homework Avg } \times 0.15) + (\text{Projects Avg} \times 0.30) + (\text{Tests Avg} \times 0.15) + (\text{Final Exam Avg } \times 0.25)\]

Daily Activities will be given, to be added to the corresponding portfolio section. Daily Activities may occur at any point during the class.

**Homework** – Homework will be assigned for each section discussed. Homework problems will be found in MyLabsPlus. Homework should be worked out on paper and kept in an organized notebook so you will have something to study at test time. Answers obtained for the homework problems need to be entered in MyLabsPlus. You’ll have aids you can click on to help you work the problems if you have trouble or need help. **MyLabsPlus will keep track of your homework percentage.** Once the Due Date has passed, you can complete assignments but you will be assessed a 10% penalty per day late per assignment.

**Projects** – There is a minimum of 2 projects for this class that will be discussed in greater detail in class. These projects replace the normal test for those chapters or modules.

**Test** – There is a minimum of 1 chapter/module test given in the class, which will be discussed in more detail in class.

**Final Exam** - There will be a two-hour comprehensive paper/pencil final exam. If the final exam is missed, the student will receive a grade of “F” for the course. A study guide will be given to help students prepare.

* Instructors have one week to provide feedback and post grades for all assignments unless otherwise noted by a departmental policy that has been approved by the Dean of the School.

**Academic Integrity**

It is expected that all students who attend UA-PTC conduct themselves in a manner appropriate for the college experience. Academic integrity is a vital component of collegiate behavior. The UA-PTC catalogue states, “The gaining of knowledge and the practice of honesty go hand-in-hand.”
The catalogue also states, “The responsibility and authority of initiating discipline arising from violations of the rules against dishonesty during the process of the course are vested in the instructor of that course.”

The complete Academic Integrity Policy is in the UA-PTC code of conduct.

**Academic Dishonesty** (Copyright © 2012 by Jim Vander Putten):

The following definitions are the most common forms of academic dishonesty.

1. **Cheating**: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes the following classes of dishonesty:
   a. Copying from another student’s paper.
   b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the professor.
   c. Collaboration with another student during the examination.
   d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of a coming examination, or the use of any such material.
   e. Substituting for another person during an examination or allowing such substitution for oneself.
   f. Bribery of any person to obtain examination information.

2. **Collusion**: Collusion is defined as obtaining from another party, without specific approval in advance by the professor, assistance in the production of work offered for credit, to the extent that the work reflects the ideas of the party consulted rather than those of the person in whose name the work is submitted.

3. **Duplicity**: To offer for credit identical or substantially unchanged work in two or more courses, without specific advance approval of the professors involved.

4. **Plagiarism**: To adopt and reproduce as one’s own, to appropriate to one’s own use, and incorporate in one’s own work without acknowledgement the ideas or passages from the writings or works of others.

For any instance of academic dishonesty that is discovered by the instructor, whether the dishonesty is found to be cheating, collusion, duplicity, or plagiarism, the result for the student or students involved will be that the instructor will assign a grade of F for the examination or assignment involved. The offense may also be reported to the Dean of Students following UA-PTC policy. A ‘zero tolerance’ policy regarding academic dishonesty is in effect for this course.

**Electronic Equipment**: The use of non-calculator electronic devices (such as cell phones, tablets, smart watches, iPad, iPod, etc.) is strictly prohibited during proctored assessments (in-class quizzes, tests, and final exam) and will be considered an act of academic dishonesty. The use of such devices during prohibited times may result in a ‘F’ (zero) on the assignment, and will be reported to the Dean of Students, and may be recorded on your Academic Records at Pulaski Technical College.
Please refer to the UA-PTC Student Handbook referenced above for specific rights and responsibilities surrounding any allegation of academic dishonesty.

Accommodation Policy

Services for Students with Disabilities: UA-PTC is committed to fulfilling all federal requirements as stated in the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the American with Disabilities Amendments Act (ADAAA) of 2008. Accommodations are available to students who have documented disabilities. Students who request accommodations must register with the Disability Services Office (Main Campus: 501-812-2738 or South Campus: 501-812-2862) and must provide current and relevant documentation.

Students requesting accommodations should inform the instructor at the beginning of the course or as soon as accommodations are approved. It is the student’s responsibility to provide their Accommodation Letter to the instructor. Accommodations are not retroactive and will only be provided once your instructor receives the Accommodation Letter.

Student Code of Conduct

All students are expected to abide by the UA-PTC Student Code of Conduct. For the full Student Code of Conduct, access the most current version of the UA-PTC Academic Catalog. [http://uaptc.azurewebsites.net/docs/default-source/course-catalog/2017-18-academic-catalog.pdf?sfvrsn=a08a3038_2](http://uaptc.azurewebsites.net/docs/default-source/course-catalog/2017-18-academic-catalog.pdf?sfvrsn=a08a3038_2)

Sexual Misconduct

No person at Pulaski Technical College will, on the basis of gender, be excluded from participation in, be denied benefits of, or be subjected to sex discrimination, sexual harassment or sexual misconduct under any education program or activity. All college administrative policies and procedures regarding sex discrimination, sexual harassment, and sexual misconduct are in compliance with Title IX. Students who feel they are victims of sexual misconduct should contact the UA-PTC Title IX Deputy Coordinator for Students:

Michelle Anderson, Director of Student Life and Leadership  
Campus Center Building Room 216  
501-812-2756  
manderson@uaptc.edu

Course Evaluations

Students may be asked to evaluate their instructor and course near the end of the semester. These student evaluations are very important to the improvement in the quality of instruction and course materials. All results are anonymous and shared with the faculty only after the semester is over and grades have been posted.
Information Literacy

UA-PTC is committed to the Information Literacy Competency Standards for Higher Education as established by the Association of College and Research Libraries and endorsed by the National Forum on Information Literacy. Therefore, all courses will incorporate an information literacy component so that, by graduation, all students will be able to recognize the need for information, then locate, evaluate, synthesize, and communicate information in an ethical manner. Information literacy encompasses critical thinking, research, media, technology, health, business, and visual literacy skills to produce lifelong learners who can make informed decisions in the workplace and in their personal lives.

Stuff Happens!
Servers go down; computers don’t work as anticipated; life throws us curveballs. Be prepared!

Do not wait until the last minute…you may experience completion difficulties! Work ahead of schedule and have a backup plan at a different location in case something happens at your usual location or to your computer; occasionally use your backup plan to make sure it works! Remember that you can use the open labs at PTC and the public libraries have computers.

We do not anticipate difficulties with the MLP server, however if the server goes down unexpectedly, the instructor will try to be lenient about a specific assignment due date, but you should never wait until the day an assignment is due.

Procrastination is the enemy!
## Tentative Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Assignment/Activity</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction/ Syllabus</td>
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<tr>
<td>2</td>
<td>4A Taking Control of Your Finances</td>
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<tr>
<td></td>
<td>Begin Finance Project</td>
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<tr>
<td>3</td>
<td>4B The Power of Compounding</td>
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<tr>
<td></td>
<td>Continue Finance Project</td>
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<tr>
<td>4</td>
<td>4D Loan Payments, Credit Cards, and Mortgages</td>
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<tr>
<td></td>
<td>Complete Finance Project (MW classes only meet one day this week)</td>
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<tr>
<td>5</td>
<td>1A Living in the Media Age</td>
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<td></td>
<td>1D Analyzing Arguments</td>
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<td>6</td>
<td>5A Fundamentals of Statistics</td>
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<td></td>
<td>5B Should You Believe a Statistical Study?</td>
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<td>7</td>
<td>5C Statistical Tables and Graphs</td>
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<td></td>
<td>Begin Statistics Project</td>
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<tr>
<td>8</td>
<td>5E Correlation and Causality</td>
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<td></td>
<td>Continue Statistics Project</td>
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<td>9</td>
<td>6A Characterizing Data</td>
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<td></td>
<td>6B Measures of Variation</td>
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<td>10</td>
<td>6C The Normal Distribution</td>
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<td></td>
<td>Continue Statistics Project</td>
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<tr>
<td>11</td>
<td>7D Assessing Risk</td>
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<tr>
<td></td>
<td>Complete Statistics Project</td>
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<tr>
<td>12</td>
<td>8A Growth: Linear vs. Exponential</td>
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<tr>
<td>13</td>
<td>9A Functions: The Building Blocks of Mathematical Models</td>
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<tr>
<td>14</td>
<td>9B Linear Modeling</td>
</tr>
<tr>
<td>15</td>
<td>Review and Test on Modeling, Chapters 8 and 9</td>
</tr>
<tr>
<td>16</td>
<td>Review for Final Exam</td>
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</tbody>
</table>

**Final Exam Schedule:** *Thursday, December 13th from 6:30pm – 8:30pm*

Disclaimer: This schedule is a guide for the semester. The instructor reserves the right to amend the schedule as necessary.
Course Agreement Form

Read, complete, and return to instructor:

I have read the course syllabus for Rachel Caruthers’ Mathematical Reasoning class at Pulaski Technical College, and I understand its content. I also understand the rules for the class, and I will follow and abide by these rules, including those relating to attendance, assignments, grading criteria, plagiarism, and behavior.

________________________________________
Semester

________________________________________
Date

________________________________________
Print name

________________________________________
Signature

________________________________________
UA-PTC Email address

________________________________________
Telephone

________________________________________
Major or field of interest