**Marshall University**

**Syllabus**

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| Course Title/Number | Concepts and Applications (CT) / MTH 121B-231 |
| Semester/Year | Spring 2017 |
| Days/Time | MWF 10-10:50 pm and W 9-9:50 |
| Location | KANGC 136 |
| Instructor | Vincent Smith |
| Office | GC 326F |
| Phone | N/A |
| E-Mail | [smith2199@marshall.edu](mailto:smith2199@marshall.edu) |
| Office/Hours | 10 – 11, 12 – 2 Tuesday and Thursday or by appointment |
| University Policies | By enrolling in this course, you agree to the University Policies listed below. Please  read the full text of each policy by going to [www.marshall.edu/academic-affairs](http://www.marshall.edu/academic-affairs) and  clicking on “Marshall University Policies.” Or, you can access the policies directly by  going to [www.marshall.edu/academic-affairs/policies/](http://www.marshall.edu/academic-affairs/policies/). Academic  Dishonesty/Excused Absence Policy for Undergraduates/Computing Services  Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic  Forgiveness/Academic Probation and Suspension/Academic Rights and  Responsibilities of Students/Affirmative Action/Sexual Harassment  **Academic Dishonesty:** If a student behaves academically dishonest in any way, i.e. copying/turning in another’s work or cheating on quizzes or exams, I reserve the right to fail the individual. The behavior may be reported to the department chair and/or dean of the college and could result in expulsion from the university. Please refer to your handbook for further details.  **Disabilities and/or Special Needs:** If any students have a disability and/or special need that interferes with their involvement in the classroom, they must see the Office of Disability Services, Prichard Hall 117, phone 304-696-2271. Appropriate accommodations can then be made.  **Inclement Weather Policy:** Students can find information concerning Marshall’s  policy regarding inclement weather on pp. 64-65 of the 2010-  2011 undergraduate online catalog  http://www.marshall.edu/catalog/undergraduate/ug\_10-  11\_published.pdf. |

**Course Description: From Catalog**

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| This is a critical thinking course for non-science majors. Topics include logical thinking, problem solving, linear modeling, beginning statistics and probability, exponential and logarithmic modeling, and formula use. Please note that this class meets a Core I/Critical Thinking requirement. |

**The table below shows the following relationships: How each student learning outcomes will be practiced and assessed in the course.**

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| **Course Student Learning Outcomes** | **How students will practice each outcome in this Course** | **How student achievement of each outcome will be assessed in this Course** |
| **1: Integrative Thinking:**  Students will **make connections** and **transfer** skills and learning among varied disciplines, domains of thinking, experiences, and situations. | Students are assigned homework containing word problems from different disciplines. | Students will be assessed using eight exams and a final. |
| **2: Communication Fluency** - Students will **develop** cohesive oral, written, and visual communications **tailored** to specific audiences. | Students will complete a draft of a budget for themselves. | Students will complete a Budget Project. |
| **3: Inquiry Based Thinking** - Students will **formulate** focused questions and hypotheses, **evaluate** existing knowledge, **collect** and **analyze** data, and **draw** justifiable conclusions. | Students will complete a draft of a budget for themselves. | Students will complete a Budget Project. |
| **4: Metacognitive Thinking** - Students will **evaluate** the effectiveness of a project plan or strategy to **determine** the degree of their improvement in knowledge and skills. | Students are assigned homework and allowed to correct their homework as needed. | Students will be assessed using eight exams and a final. |
| **5: Quantitative Thinking** - Students will **analyze** real‐world problems quantitatively, **formulate** plausible estimates, **assess** the validity of visual representations of quantitative information**,** and **differentiate** valid from questionable statistical conclusions. | Students are assigned homework with basic computational problems and word problems. | Students will be assessed using eight exams and a final. |

**Required Texts, Additional Reading, and Other Materials**

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| 1. The required text is Using and Understand Mathematics: A Quantitative   Reasoning Approach by Jeffrey Bennett and William Briggs, 6th Edition.   1. Students are required to have a scientific calculator. However, most calculations can be done simply with a pencil and piece of paper. 2. Students must also have a way to access their Marshall email account. |

**Course Requirements / Due Dates**

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| 1. All due dates can be found on the course schedule. |

**Grading Policy**

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| **Student Assessment:** Students will be assessed using various methods, such as assigned  homework, exams, and a budget project. Homework will be due after the completion of each chapter.  **Exams:** 5% each = 40% total  **Final:** 20%  **Homework:** 20%  **Projects:** 20%  **Grading Scale:** 100% - 90% A  89% - 80% B  79% - 70% C  69% - 60% D  59% and below F  **Note:** Please note that an incomplete cannot be given unless the student completes 75% of the course. |

**Attendance Policy**

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| Attendance will not be taken, but students are strongly urged to attend since points may be  lost by not turning in assignments and/or missing exams. Tests and assignments can  only be turned in and/or made up if the student is present or has a university excused absence. Please  consult your handbook for excused absences and the required documentation for excuses.  When in attendance I expect each student to behave respectively. You must not only have respect for me,  but respect for your fellow classmates as well. If your actions become disruptive or distracting for me  or another student, you will be asked to cease your behavior. If you choose to continue, you will be  asked to leave. Disruptive behaviors may include, but are not limited to, the following: cell phone use  in class, talking during class, and the use of mp3 players during class. |

**Tutoring Services**

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| Video tutoring on the South Charleston is available. Please contact Jennifer Henning at 304-746-2079 or  [henning@marshall.edu](mailto:henning@marshall.edu). In-person tutoring services are available on the Huntington Campus in Smith Music Hall  115 daily.  I strongly suggest you take advantage of these **FREE** services. |

**Course Schedule (tentative):**

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| Week | Monday | Tuesday | Wednesday | Thursday | Friday |
| 1 | Syllabus and Introductions  **Discuss Project** |  | 1B  1B Hmwk: 19, 21, 31, 51,55,59, 65 |  | 1C  1C Hmwk: 15,19,21, 29,33,37,43,55, 59 |
| 2 | University Closed |  | 1D  1D Hmwk: 15,17,23, 27, 29-39 odd |  | Ch 1 Hmwk Due  **Test 1** |
| 3 | 2A  2A Hmwk: 13,19,23, 41,45,49,57,63,69,75 |  | 2B  2B Hmwk: 15,23,25, 31,33,35,37,43,45,53 |  | 2C  2C Hmwk: 7,9,11,15 |
| 4 | Chapter 2 Test Review |  | **Test 2**  Ch. 2 HW Due |  | 3A  3A HW: 17,19,21,23, 25,27, 29,31,49,51 53,69,71,75 |
| 5 | 3B  3B Hmwk: 17,19,25, 27,41,43,45,47,49,51 |  | 3C  Worksheet |  | Ch 3 HW Due  **Test 3** |
| 6 | 4B  4B HW: 33,45,55, 63 65,67,71,75,85,87,81 |  | 4B cont. |  | 4C  4C Hmwk: 15-33 odd |
| 7 | 4D  4D Hmwk: 15,17,19, 21,23,27 29,33,37,39 |  | 4E\*\*\* |  | **Project Due**  Ch. 4 Review |
| 8 | **Test 4\*\*\***  Ch 4 HW Due |  | 5A  5A HW: 15,17,19,27, 29,31,33,35,37,47,49,55-59 a,b only |  | 5C  5C: HW: 15,25,27,29,31,33,44 |
| 9 | 5E\*\*\* |  | Ch5 HW Due  **Test 5** |  | 6A  6A Hmwk: 13-27 odd, 31 |
| 10 | 6B  6B Hmwk: 15,17 |  | 6B cont. |  | 6C  6C Hmwk: 19,21,23, 25,33,37,41,43 |
| 11 | 6D\*\*\*  6D |  | Review Ch. 6 |  | Ch 6 Hmwk Due  **Test 6** |
| 12 | 7A  7A Hmwk: 15,19 21, 23,25,27,31,35,37,47 |  | 7B  7B Hmwk: 13-31 odd |  | “Probability Game” Day |
| 13 | 7E  7E Hmwk: 15-33 odd |  | Review |  | **Test 7**  **Ch. 7 HW Due** |
| 14 | 8A  8A Hmwk: 9-25 odd |  | 8B  8B HW: 25-31 odd, 41-47 odd |  | Ch8 Hmwk Due  **Test 8** |
| 15 | Dead Week  Review? | Dead Week | Dead Week  Review? | Dead Week | Dead Week  Review? |
| Finals Week | **Final - Monday May 1**  10:15-12:15 |  |  |  |  |