**Marshall University**

**Syllabus**

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| Course Title/Number | Concepts and Applications (CT) / MTH 121B-131 |
| Semester/Year | Fall 2018 |
| Days/Time | **W, 1100a - 1150a, MWF, 1200p - 1250p** |
| Location | KANGC 217 |
| Instructor | Vincent Smith |
| Office | GC 326F |
| Phone | N/A |
| E-Mail | [smith2199@marshall.edu](mailto:smith2199@marshall.edu) |
| Office/Hours | Office Hours: MF 10:40-12, W 9:50-11, TR 11:50-1 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; TI-30XIIS or similar model. 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%  **Project:** 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. Assignments can only be turned in and/or made up if the student is present or has a university excused absence. Please consult the student handbook for excused absences and the required documentation for excuses. |

**Tutoring Services**

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| Drop in tutoring on the South Charleston is available on Tuesday and Thursday from 3-5 in the library. No appointment is needed. 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, 31, 35, 51,55,59, 65 |  | 1C  1C Hmwk: 13,15, 1719,21,23,25,27 29,33,37,43,57, 59 |
| 2 | 1D  1D Hmwk: 15,17,23, 27, 29-39 odd |  | Ch 1 Hmwk Due  **Test 1** |  | 2A  2A Hmwk: 13,19,23, 41,45,49,57,63,69,75 |
| 3 | University Closed – Labor Day |  | 2B  2B Hmwk: 15,23,25, 31,33,35,37,45,51, 57 |  | 2C  2C Hmwk: 7,9,15,19 |
| 4 | Chapter 2 Test Review |  | **Test 2**  Ch. 2 HW Due |  | 3A  3A HW: 17,19,21,23, 25,27, 29,31,49,51 53,65,67,75,83,85 |
| 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 65,67,71,75,81,85,87 |  | 4B cont. |  | 4C  4C Hmwk: 15-33 odd |
| 7 | 4D  4D Hmwk: 15,17,19, 21,23,27 29,33,37,39 |  | **Project Due**  Ch. 4 Review |  | **Test 4\*\*\***  Ch 4 HW Due |
| 8 | 5A  5A HW: 15,17,19,27, 29,31,33,35,37,47,49,55-59 odd, a,b only |  | 5C  5C: HW: 15,21,23,25, 27,29,31,33 |  | 5E  5E: HW: 13,15,17 |
| 9 | Chapter 5 Test Review |  | Ch5 HW Due  **Test 5** |  | 6A  6A Hmwk: 13-19 odd, 27, 31, 37, 39 |
| 10 | 6B  6B Hmwk: 15,17 |  | 6B cont. |  | 6C  6C Hmwk: 19,21,23, 25,33,37,41,43 |
| 11 | 6D  6D HW: 21, 23, 25, 27,29 |  | Review Ch. 6 |  | Ch 6 Hmwk Due  **Test 6** |
| 12 | 7A  7A Hmwk: 15,19 21, 23,25,27,31,35,37,49,55 |  | 7B  7B Hmwk: 13-23 odd, 27-33 odd, 41 |  | 7C  7C HW: 13,19,31,38 (Yes, an even) |
| 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 10:15 – 12:15**  **(Tentative time, will be discussed)** |