# SYLLABUS: 0514.402.01—RESEARCH METHODS

**Rochester Institute of Technology**  
**College of Liberal Arts, Department of Psychology**  
**Fall Quarter—20081**

**Course Title:** Research Methods  
**Meeting Times:** Tuesdays and Thursdays 2:00—3:50 pm, at 01-3355.  
**Instructor:** Esa M. Rantanen, Ph.D. esa.rantanen@rit.edu  
**Office:** 01-3140 Eastman Bldg.; Tel. (585) 475-4412  
**Office Hours:** Tuesdays and Wednesdays, 12:00 noon—2:00 pm or by appointment  
**Other Readings:** TBA

**Course Description:** An introduction to the logic of various research methods and the application of scientific methods to the study of behavior. The course will cover a wide range of research designs and techniques including surveys, correlational designs, quasi-experimental designs, and true experimental designs, with the emphasis on the logic of experimentation. Students will also learn about presentation of results in APA style and critical reading of research papers and reports. Required course for the psychology minor.

**Prerequisites:** 0514-210 or equivalent.

**Expectations:**  
*Class participation.* Active class participation is expected. Much of the material will be presented only in lectures and discussions and will not be available in textbooks or other readings.

*Homework:* Homework will be assigned on an *ad hoc* basis to supplement materials covered during class meetings. Exact instructions and due dates for each assignment will be provided. *No late homework will be accepted.* Similarly, several quizzes will be administered during the class time throughout the course.

*Presentations:* Short presentations will be assigned to each student, including a written outline. The presentations will be graded on their accuracy and information content and the student’s level of preparedness.

*Exams:* There will be an in-class, closed book, closed notes comprehensive final exam.

**Grading:**

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<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Class participation</td>
<td>20%</td>
<td>A: ≥ 90%</td>
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<tr>
<td>Homework</td>
<td>20%</td>
<td>B: 80-89%</td>
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<tr>
<td>Midterm Exams (2 x 10%)</td>
<td>20%</td>
<td>C: 70-79%</td>
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<tr>
<td>Final Exam:</td>
<td>40%</td>
<td>D: 60-69%</td>
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<td>TOTAL:</td>
<td>100%</td>
<td>F: &lt; 60%</td>
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**Class Policies:** Documented medical, bereavement, or religious reasons are valid excuses for absence. Any other absences must be approved and arrangements for make-up assignments made prior to the class in question.

*Cheating:* This includes plagiarism; the Institute and College of Liberal Arts policies on cheating will be followed and most severe sanctions permitted advocated.

**Course Website:** [https://mycourses.rit.edu](https://mycourses.rit.edu)
Course Schedule:
The course will cover the topics in approximately the following order; unless otherwise noted, the chapter and page numbers refer to the course text, Ray, 2008.

Note that the below schedule is tentative and may be modified as necessary as the course progresses; any changes will be posted in the myCourses course website and reflected in handouts.

1. Tuesday, September 2: Introductions, syllabus. Science (ch. 1)
2. Thursday, September 4: Methods of Science (ch. 2)
3. Tuesday, September 9: Development of Hypotheses (ch. 3)
4. Thursday, September 11: Discussion of Ethics (ch. 4)
5. Tuesday, September 16: Measurement, (ch. 5)
6. Thursday, September 18: Inferential Statistics (ch. 6)
7. Tuesday, September 23: 1st Midterm Exam
8. Thursday, September 25: Presentations (HW #1)
9. Tuesday, September 30: Testing of Hypotheses (ch. 7)
10. Thursday, October 2: Control (ch. 8)
11. Tuesday, October 7: Control (ch. 8)
12. Thursday, October 9: Between-Subjects Designs (ch. 9)
13. Tuesday, October 14: Within- and Matched-Subjects Designs (ch. 10)
14. Thursday, October 16: The Ecology of the Experiment (ch. 11)
15. Tuesday, October 21: Non-Experimental Designs (ch. 12)
16. Thursday, October 23: Single-Subject Designs (ch. 13)
17. Tuesday, October 28: Questionnaires, Surveys, and Sampling (ch. 14)
18. Thursday, October 30: 2nd Midterm Exam
19. Tuesday, November 4: Sharing the Results (ch. 15), the APA style
20. Thursday, November 6: Beyond Method (ch. 16), Limits and Limitations of Science