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## Information Technology and Management Undergraduate Assessment Report Fall 2017

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## Information Technology and Management Undergraduate Assessment Report Fall 2017

1. Identification of learning goal(s) assessed
  - a. Bachelor of Information Technology and Management Program Learning Objective.
    - i. 3. Apply current technical and mathematical concepts and practices in the core information technologies and recognize the need to engage in continuing professional development
  - b. Bachelor of Information Technology and Management Student Outcomes (<https://appliedtech.iit.edu/information-technology-and-management/programs/undergraduate>)  
The Bachelor of Information Technology and Management degree produces graduates who are able to:
    - i. (a) Apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline
    - ii. (d) Function effectively on teams to accomplish a common goal
    - iii. (e) Recall and discuss professional, ethical, legal, security and social issues and responsibilities
    - iv. (h) Recognize the need for and engage in continuing professional development
    - v. (l) Effectively integrate IT-based solutions into the user environment
    - vi. (n) Assist in the creation of an effective project plan
    - vii. **Note:** These correspond to the ABET Student Outcomes in Information Technology with the same letters, with our wording adjusted to comply with ITM Department standards for objectives and outcomes.
  - c. Graduate courses were included in assessment data collection but are reported separately.
2. Description of data collection methodology used
  - a. Surveys: Data was collected via a survey with questions tailored for each course, as well as through direct measures using a rubric to assess outcomes in a course assignment. Learning goals assessed in this cycle are listed in paragraph 1 above. The population surveyed and the goals assessed were as follows:
    - ITM 301 – Student outcomes (e) (h) and (l)
    - ITMD 311 – Student outcomes (a) and (h)
    - ITMM 471 – Program Learning Objective 3  
Student outcomes (d) (e) (h) and (n)
    - i. 163 surveys were collected in December 2017. Surveys assessed course outcomes, BITM Student outcomes, and Program Learning Objectives.
  - b. Student artifacts in the form of homework assignments and projects were evaluated by faculty for the attainment of student outcomes. A representative sample of 10 artifacts were assessed unless there were fewer available, in which case all available artifacts were assessed. Outcomes assessed through evaluation of student artifacts were as follows:

- ITM 301 – Student outcomes (e) and (h)
  - ITMD 311 – Student outcome (a) and ITM 311 course outcome 4
  - ITMM 471 – Student outcomes (d) and (n)
- c. Evaluation of assessments was completed in May of 2018.
3. Presentation of Results
- a. Full results of the survey are presented in Appendix A to this report. Total enrollment in courses surveyed was 244. 163 students responded. The total student response rate was 67% and total response for undergraduates was 65%.
- i. Total undergraduate enrollment in courses surveyed was 122. 79 students responded. The total undergraduate student participation rate was 65%.
- b. Full results of the student artifact assessment are presented in Appendix B to this report.
- i. Each evaluator reviewed between seven and ten student artifacts in the form of course assignments or projects. They ranked the attainment of two outcomes in each course evaluated on a scale of 1-5, designed to specifically equate to the 1-5 scale used in the survey questions as to outcome attainment.
4. Discussion of Survey Results
- a. The assessment was evaluated by members of the ITM Curriculum Committee in May 2018. Evaluators included:
- Ray Trygstad, ITM Associate Chair and Industry Professor
  - James Papademas, Industry Professor
  - Jeremy Hajek, Industry Associate Professor
- b. Summary of Main Findings and Conclusions
- i. In all courses, a majority of students agreed or strongly agreed in the survey that they had achieved the outcome or objective addressed in each question. Overall 81% of undergraduate students agreed or strongly agreed that they had achieved the outcome or objective addressed in each survey question, and 91% agreed or strongly agreed that they had achieved the ITM Student Outcomes.
- 2) There were no significant exceptions to majority agree/strongly agree
- a) ITM 301: There was an average of 88% agree or strongly agree with no outcomes less than 71% agree or strongly agree.
  - b) ITM 311: There was an average of 76% agree or strongly agree with no outcomes with less than 65% agree or strongly agree.
  - c) ITMM 471: There was an average of 85% agree or strongly agree with no outcomes with less than 67% agree or strongly agree. Eight of twenty questions had neutral responses of 27-23%, and only two questions had more than 10% disagree or strongly disagree.
- 3) There are only a very minimal scattered number of Disagree/ Strongly Disagree responses in each course. In this assessment cycle, this typically they represent one or two of the respondents in each course. We believe this is a reasonable number of students who just “don’t get it” in most courses. In an ideal world there would be no responses at this level, but we judge this to be an acceptable level.

ii. Assessment of specific objectives and outcomes.

- 1) ITM 301 Student Outcome (e) survey question: *This course helped me to understand professional, ethical, legal, security and social issues and responsibilities* – 57% strongly agree, 38% agree, 5% neutral, and 0% disagree. 95% in agreement represents nearly complete success in students who believe that they have attained this outcome.
- 2) ITM301 Student Outcome (h) survey question: *I recognize the need to engage in continuing professional development* – 62% strongly agree, 19% agree, 19% neutral, and 0% disagree. 81% in agreement represents a very significant percentage of students who believe that they have attained this outcome.
- 3) ITM 301 Student Outcome (l) survey question: *I am able to effectively integrate IT-based solutions into the user environment* – 48% strongly agree, 43% agree, 5% neutral, and 5% disagree. 91% in agreement represents a very significant percentage of students who believe that they have attained this outcome.
- 4) ITM 311 Student outcome (a) survey question: *I can apply my knowledge of computing and mathematics within my discipline* – 39% strongly agree, 48% agree, and 13% neutral. 87% in agreement represents a very significant percentage of students who believe that they have attained this outcome.
- 5) ITM 311 Student outcome (h) survey question: *I recognize the need to engage in continuing professional development* – 45% strongly agree, 39% agree, 13% neutral, and 3% disagree. 84% in agreement represents a very significant percentage of students who believe that they have attained this outcome.
- 6) ITMM 471 Student outcome (d) survey question: *I am able to function effectively on teams to accomplish a common goal* – 78% strongly agree, 19% agree, and 4% neutral. 96% in agreement represents nearly complete success in students who believe that they have attained this outcome.
- 7) ITMM 471 Student outcome (e) survey question: *I have an understanding of professional, ethical, legal, security and social issues and responsibilities* – 48% strongly agree, 41% agree, 7% neutral, and 4% disagree. 89% in agreement represents a very significant percentage of students who believe that they have attained this outcome.
- 8) ITMM 471 Student outcome (h) survey question: *I recognize the need to engage in continuing professional development* – 74% strongly agree, 22% agree, and 4% neutral. 96% in agreement represents nearly complete success in students who believe that they have attained this outcome.
- 9) ITMM 471 Program Learning Objective 3 survey question: *I can apply current technical and mathematical concepts and practices in the core information technologies* – 33% strongly agree, 37% agree, 26% neutral, and 4% strongly disagree. 70% in agreement represents a significant percentage of students who believe that they have attained this outcome.

5. Discussion of Student Artifact Assessment results
  - a. The Student Artifacts were evaluated by members of the ITM Faculty in May 2018. Evaluators included:
    - James Papademas, Industry Professor
    - Jeremy Hajek, Industry Associate Professor
    - Katherine Papademas, Adjunct Industry Professor
    - Luke Papademas, Adjunct Industry Professor
    - William Slater, Adjunct Industry Professor
  - b. Summary of main findings and conclusions
    - i. The average evaluation for all courses assessed fell at 4.82 on a scale of 5, which represents that students were fully able to demonstrate attainment of each outcome. This is a very positive outcome of representative assignments and projects from the courses assessed.
    - ii. Student artifacts were selected by faculty members for each course assessed. The selection was representative and were excellent choices for assessing attainment of the outcomes selected for evaluation.
    - iii. A conscious decision was made to only evaluate two outcomes per course and consequently Student Outcome (I), *Effectively integrate IT-based solutions into the user environment*, was not assessed through student artifacts.
6. Description of improvement plans
  - a. No changes to the content or delivery of ITM 301 are proposed or warranted as outcomes are being met and the course is properly meeting the appropriate role in the curriculum.
  - b. No changes to the content or delivery of ITM 311 are proposed or warranted as outcomes are being met and the course is properly meeting the appropriate role in the curriculum.
  - c. No changes to the content or delivery of ITMM 471 are proposed or warranted as outcomes are being met and the course is properly meeting the appropriate role in the curriculum.
7. Assessment process recommendations
  - a. When courses are selected for assessment, the Curriculum Committee should then coordinate with the course instructors the selection of assignments or projects to be assessed in advance to optimize the quality and completeness of artifact assessment.
8. Assessment Plan for Spring 2018
  - a. Included in the attached *Information Technology and Management Assessment Plan Spring 2018*

# Fall 2017 ITM Course Assessment Analysis

The Information Technology & Management (ITM) Assessment Plan for 2016 - 2018 assessed the following undergraduate and graduate courses:

**ITM 301 Introduction to Contemporary Operating Systems and Hardware I**

**ITM 311 Introduction to Software Development**

**ITMM 471 Project Management for Information Technology & Management**

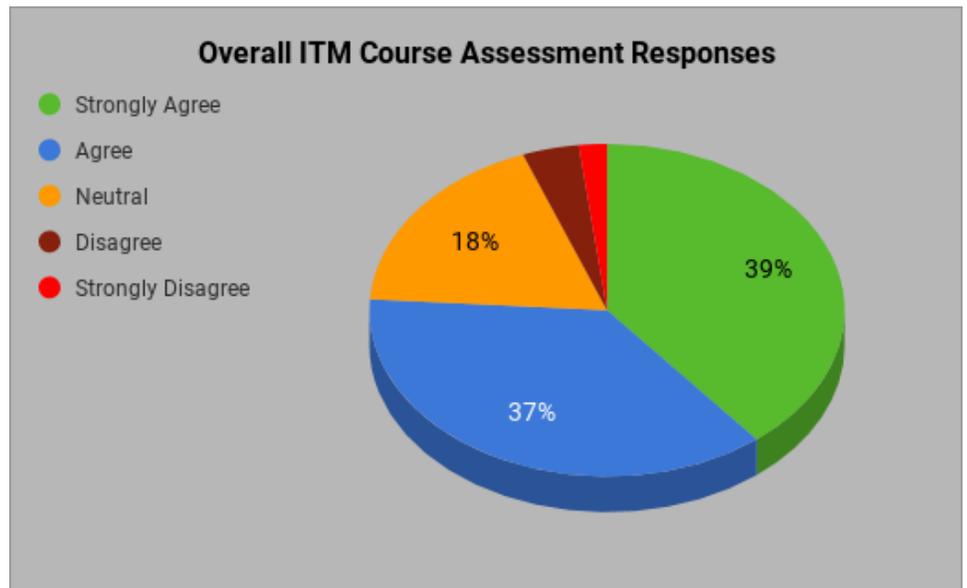
**ITMD 510 Object-Oriented Application Development**

**ITMS 548 Cyber Security Technologies**

For undergraduate courses, assessment questions were created based on course outcomes on the syllabus, ABET student outcomes and the BITM Program Educational Objectives (both outcomes and objectives found on a separate tab) as defined by the ITM Department for the HLC.

For graduate courses, assessment questions were created based on course outcomes on the syllabus and the MITM Program Educational Objectives (found on a separate tab) as defined by the ITM Department for the HLC.

Total ITM Students Assessed	244
Total Assessment Respondents	163
Total Assessment Responses	1946
Assessment Participation Rate	67%



All assessment questions used the following scale:

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

## Fall 2017 ITM Assessment Results

## ABET Student Outcomes &amp; Program Objectives

**ABET Student Outcomes**

(a) An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline

(b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution

(c) An ability to design, implement, and evaluate a computer-based system, process, component, or program

(d) An ability to function effectively on teams to accomplish a common goal

(e) An understanding of professional, ethical, legal, security and social issues and responsibilities

(f) An ability to communicate effectively with a range of audiences

(g) An ability to analyze the local and global impact of computing on individuals, organizations, and society

(h) Recognition of the need for and an ability to engage in continuing professional development

(j)(1) An ability to use and apply current technical concepts and practices in the core information technology of human computer interaction

(j)(3) An ability to use and apply current technical concepts and practices in the core information technology of programming.

(j)(5) An ability to use and apply current technical concepts and practices in the core information technology of web systems and technologies.

(l) An ability to effectively integrate IT-based solutions into the user environment.

(m) An understanding of best practices and standards and their application.

(n) An ability to assist in the creation of an effective project plan.

**BITM Program Educational Objectives**

1. Problem solve and create innovative answers to provide technology solutions for the problems of business, industry, government, non-profit organizations, and individuals.

2. Perform requirements analysis, design and administration of computer and network-based systems conforming to policy and best practices, and monitor and support continuing development of relevant policy and best practices as appropriate.

3. Apply current technical and mathematical concepts and practices in the core information technologies and recognize the need to engage in continuing professional development.

**MITM Program Educational Objectives**

1. Deliver optimal technical & policy technology solutions for the problems of business, industry, government, non-profit organizations, and individuals in each student's particular area of focus.

2. Work with, lead, and manage teams in an enterprise environment to collaboratively arrive at optimal technology solutions.

3. Manage and deploy information resources applicable to each student's particular area of focus in an enterprise setting.

**MCYF Program Educational Objectives**

1. Design and implement a comprehensive enterprise security program using both policy and technology to implement technical, operational, and managerial controls.

2. Comprehensively investigate information security incidents and violation of law using computer resources in a manner such that all evidence is admissible in a court of law.

3. Technically secure enterprise information assets and resources to deter, detect, and prevent the success of attacks and intrusions.

Outcomes and objectives being assessed this term are highlighted in green.

# Fall 2017 ABET Student Outcomes Assessment Analysis

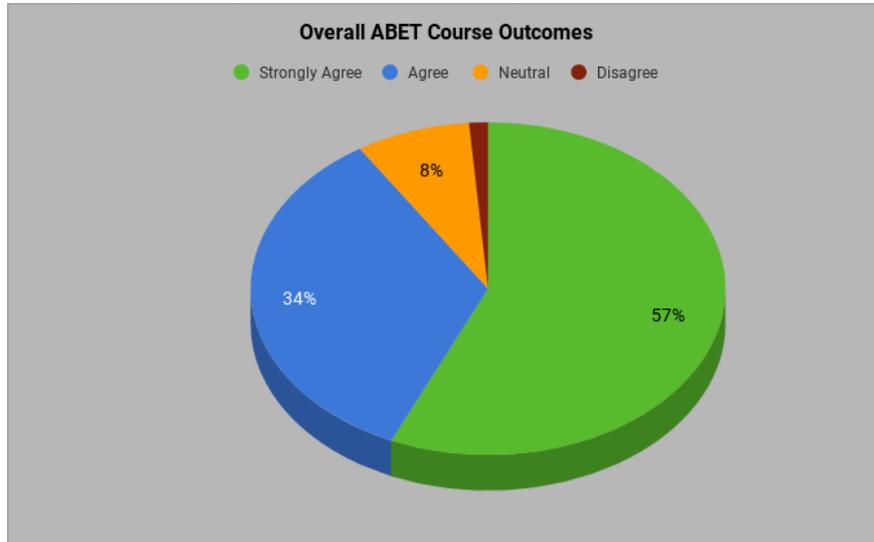
The Information Technology & Management (ITM) Assessment Plan for 2016 - 2018 assessed the following undergraduate courses:

- ITM 301 Introduction to Contemporary Operating Systems and Hardware I**
- ITM 311 Introduction to Software Development**
- ITMM 471 Project Management for Information Technology & Management**

For undergraduate courses, assessment questions were created based on the following ABET student outcomes: (a), (d), (e), (h), (l), (n)\*

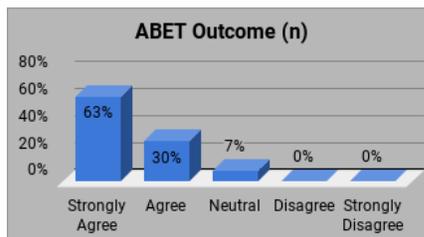
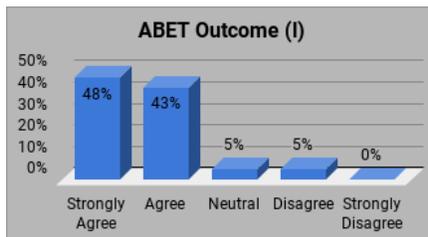
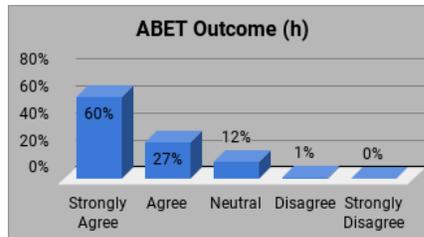
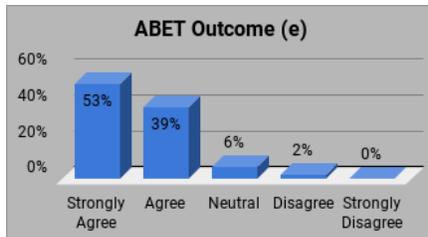
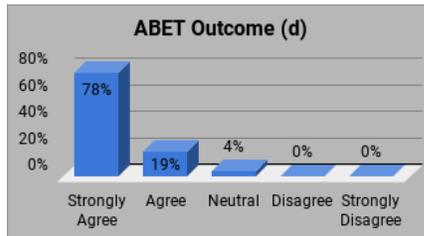
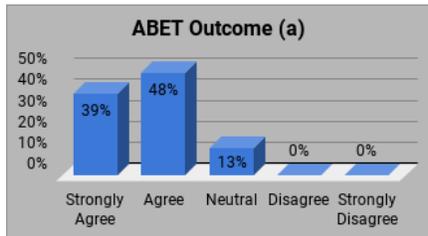
All assessment questions used the following scale:

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree



Total ITM Student Assessed	122
Total Assessment Respondents	79
Total Survey Responses	1028
Survey Participation Rate	65%

ALL ABET Outcomes Averaged 57% 34% 8% 1% 0%

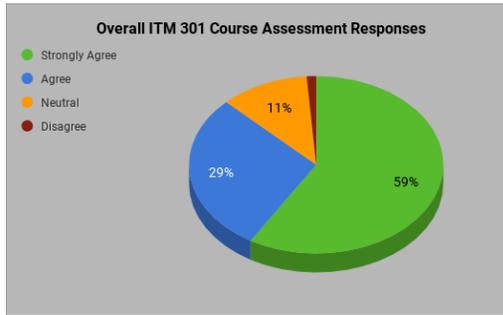


\*A list of ABET Student Outcomes and BITM & MITM Program Educational Objectives can be found on a separate tab

**STUDENT COURSE ASSESSMENTS: FALL 2017**  
**ITM 301 Introduction to Contemporary Operating Systems and Hardware I**

Instructor: Billy Papademetriou  
 Fall Enrollment: 45 Assessments collected: 21

**TALLIES: COURSE LEARNING OBJECTIVES**  
 Scale: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree



Overall Class Ranking  
**4.45**

**\*ABET outcome**

<b>Q1 This course gave me an understanding of the history of modern computing and the Internet.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
52%	38%	10%	0%	0%	0%	4.43	
<b>90% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q2 I learned about electricity and power supplies related to computers.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
67%	19%	14%	0%	0%	0%	4.52	
<b>86% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q3 I learned about how computers work and got an overview of processors.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
81%	14%	5%	0%	0%	0%	4.76	
<b>95% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q4 This course gave me hands on experience working with motherboards, buses, architecture, memory, etc.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
95%	5%	0%	0%	0%	0%	4.95	
<b>100% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q5 I learned about basic DOS Command Line Commands</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
57%	38%	5%	0%	0%	0%	4.52	
<b>95% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q6 I learned about operating systems and architecture (Windows, Linux, Mac and Mobile OS)</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
52%	33%	14%	0%	0%	0%	4.38	
<b>86% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q7 I learned to troubleshoot hardware and software.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
48%	33%	14%	5%	0%	0%	4.24	
<b>81% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q8 I have an understanding of networking, physical media, devices, protocols and standards.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
48%	29%	24%	0%	0%	0%	4.24	
<b>76% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q9 I have an understanding of networking, physical media, devices, protocols and standards and OS Utilities and Cloud computing.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
48%	24%	29%	0%	0%	0%	4.19	
<b>71% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q10 I have knowledge of laws, regulations and compliance frameworks that affect IT professionals.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
48%	33%	14%	5%	0%	0%	4.24	
<b>81% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q11 Through this course, I learned about current events in computing, especially related to security.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
86%	14%	0%	0%	0%	0%	4.86	
<b>100% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q12* This course helped me to understand professional, ethical, legal, security and social issues and responsibilities.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
57%	38%	5%	0%	0%	0%	4.52	
<b>95% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q13* I recognize the need to engage in continuing professional development</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
62%	19%	19%	0%	0%	0%	4.43	
<b>81% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q14* I am able to effectively integrate IT-based solutions into the user environment.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
48%	43%	5%	5%	0%	0%	4.33	
<b>91% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q15 Please rate your experience with the equipment in the lab section of your course.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
48%	38%	10%	5%	0%	0%	4.29	
<b>90% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q16 Please rate your experience with the conditions of the lab facility.</b>							
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>	
43%	43%	14%	0%	0%	0%	4.29	
<b>86% of students strongly agreed or agreed that they achieved this outcome.</b>							

**STUDENT COURSE ASSESSMENTS: FALL 2017****ITM 311 Introduction to Software Development**

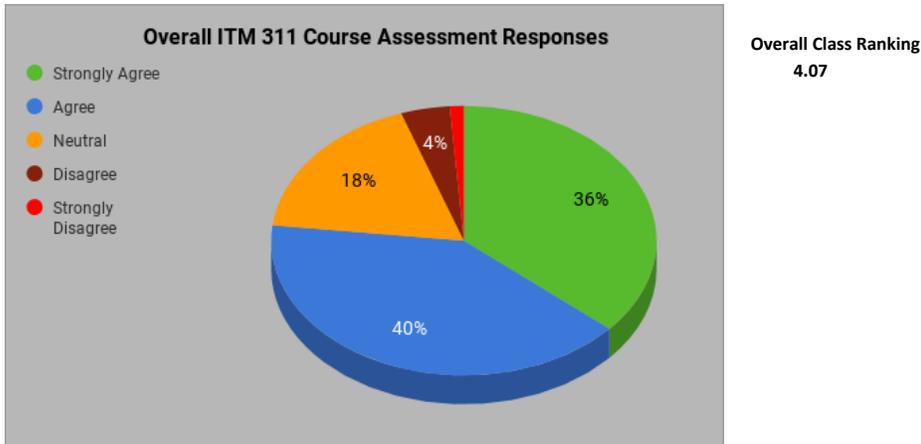
Instructor: Katherine Papademas

Fall Enrollment: 37

Assessments collected: 31

**TALLIES: COURSE LEARNING OBJECTIVES**

Scale: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

**\*ABET outcome**

<b>Q1 I am able to write and resolve programming problems using Java language.</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	39%	45%	13%	3%	0%	0%	4.19
<b>84% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q2 I can build Java Applications and Java Applets.</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	26%	45%	26%	3%	0%	0%	3.94
<b>71% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q3 I am able to identify Java standard libraries and classes.</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	32%	42%	19%	6%	0%	0%	4.00
<b>74% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q4 I learned how to write, compile, execute and troubleshoot Java programming.</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	48%	39%	10%	0%	3%	0%	4.29
<b>87% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q5 I understand and can utilize Java Graphical User Interface in the program writing.</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	39%	45%	13%	0%	3%	0%	4.16
<b>84% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q6 I have an understanding of Java programming syntax, control structures and Java programming concepts.</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	39%	39%	16%	6%	0%	0%	4.10
<b>77% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q7 I know how to locate and use Help Resources.</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	39%	26%	19%	13%	3%	0%	3.84
<b>65% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q8 I am confident in writing programs and "speaking" in Java.</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	26%	42%	29%	3%	0%	0%	3.90
<b>68% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q9 I am familiar with the various IDEs used for Java Application Programming.</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	29%	35%	26%	6%	3%	0%	3.81
<b>65% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q10* I can apply my knowledge of computing and mathematics within my discipline.</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	39%	48%	13%	0%	0%	0%	4.26
<b>87% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q11* I recognize the need to engage in continuing professional development</b>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	<b>AVG</b>
	45%	39%	13%	3%	0%	0%	4.26
<b>84% of students strongly agreed or agreed that they achieved this outcome.</b>							

**STUDENT COURSE ASSESSMENTS: FALL 2017**

**ITMM 471 Project Management for Information Technology & Management**

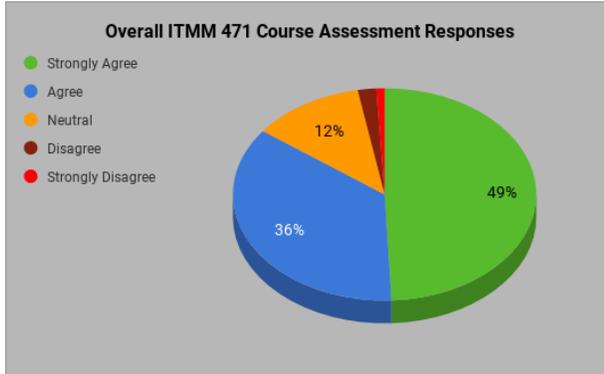
Instructor: Kathy Harper

Fall Enrollment: 40

Assessments collected: 27

**TALLIES: COURSE LEARNING OBJECTIVES**

Scale: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree



**Overall Class Ranking**  
**4.31**

*ABET outcome	#Program Educational Objective	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	AVG
<b>Q1</b>	<b>I can describe, using appropriate terminology, the current state and best practices of information technology project management.</b>	33%	33%	37%	7%	0%	0%	3.96
	<b>67% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q2</b>	<b>I learned how to analyze project management decisions in terms of technical, cost-benefit and human resource considerations.</b>	37%	56%	7%	0%	0%	0%	4.30
	<b>93% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q3</b>	<b>I am able to assess the risk exposure of an IT project and develop plans for mitigating and managing risks.</b>	63%	30%	7%	0%	0%	0%	4.56
	<b>93% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q4</b>	<b>This course taught me how to develop mechanisms for capturing and reporting objective measures of project progress.</b>	70%	22%	7%	0%	0%	0%	4.63
	<b>93% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q5</b>	<b>I know how to apply frameworks for effective planning and decision making regarding IT project management.</b>	26%	52%	11%	7%	4%	0%	3.89
	<b>78% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q6</b>	<b>I am able to describe the human resource, financial, and technical responsibilities of an IT project manager, including the unique challenges associated with outsourcing, off-shoring, and globalization.</b>	41%	48%	11%	0%	0%	0%	4.30
	<b>89% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q7</b>	<b>I can discuss the impact of quality management and process maturity on IT project management.</b>	52%	30%	15%	4%	0%	0%	4.30
	<b>81% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q8</b>	<b>I can discuss the role of portfolio management in realizing corporate strategic vision</b>	22%	44%	26%	4%	0%	0%	3.78
	<b>67% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q9#</b>	<b>I can apply current technical and mathematical concepts and practices in the core information technologies.</b>	33%	37%	26%	0%	4%	0%	3.96
	<b>70% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q10*</b>	<b>I am able to function effectively on teams to accomplish a common goal.</b>	78%	19%	4%	0%	0%	0%	4.74
	<b>96% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q11*</b>	<b>I have the ability to assist in the creation of an effective project plan.</b>	63%	30%	7%	0%	0%	0%	4.56
	<b>93% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q12*</b>	<b>I have an understanding of professional, ethical, legal, security and social issues and responsibilities</b>	48%	41%	7%	4%	0%	0%	4.33
	<b>89% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q13*</b>	<b>I recognize the need to engage in continuing professional development</b>	74%	22%	4%	0%	0%	0%	4.70
	<b>96% of students strongly agreed or agreed that they achieved this outcome.</b>							

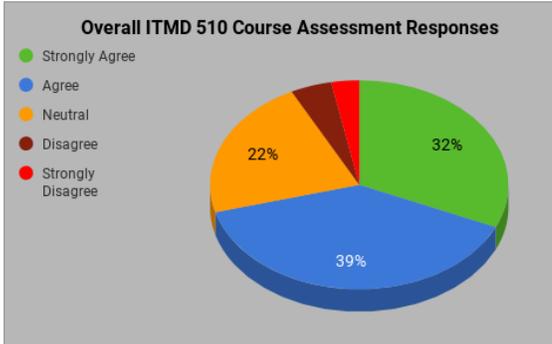
**STUDENT COURSE ASSESSMENTS: FALL 2017**  
**ITMD 510 Object-Oriented Application Development**

Instructor: James Papademas  
 Fall Enrollment: 96

Assessments collected: 69

**TALLIES: COURSE LEARNING OBJECTIVES**

Scale: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree



Overall Class Ranking  
**3.92**

**\*Program Educational Objective**

Q#	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	AVG
<b>Q1 I learned to write Object Oriented Java Standard (SE) code.</b>	45%	41%	12%	0%	3%	0%	4.25
<b>86% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q2 I am able to create a Java based Graphical User Interface with JAVA FX.</b>	39%	46%	10%	1%	3%	0%	4.17
<b>86% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q3 I know how to locate application functionality from a JDBC API database.</b>	42%	30%	22%	3%	3%	0%	4.06
<b>72% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q4 I can author well-constructed code and software documentation.</b>	32%	48%	13%	4%	3%	0%	4.01
<b>80% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q5 I am able to utilize an IDE to develop, error trap, test and debug Java SE code.</b>	33%	42%	20%	1%	3%	0%	4.01
<b>75% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q6 I understand basic Object Oriented programming concepts including Inheritance, Encapsulation, Interfaces, Polymorphism.</b>	46%	35%	13%	3%	3%	0%	4.19
<b>81% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q7 I am able to apply test driven development methodologies including Junit testing.</b>	23%	42%	28%	4%	3%	0%	3.78
<b>65% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q8 I understand packaging and deployment of Java SE.</b>	26%	42%	20%	7%	4%	0%	3.78
<b>68% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q9 I am able to perform file handling (IO) and file stream processing including knowledge of Socket Programming (NIO).</b>	16%	35%	35%	10%	4%	0%	3.48
<b>51% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q10 I have knowledge of processing strings using Regular Expressions.</b>	28%	36%	29%	6%	1%	0%	3.83
<b>64% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q11 I can describe software development terminology such as Coupling and Cohesion.</b>	23%	30%	35%	7%	4%	0%	3.61
<b>54% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q12* I am able to deliver optimal technical and policy technology solutions for the problems of business, industry, government.</b>	26%	42%	25%	6%	1%	0%	3.86
<b>68% of students strongly agreed or agreed that they achieved this outcome.</b>							

**STUDENT COURSE ASSESSMENTS: FALL 2017**

**ITMS 548 Cyber Security Technologies**

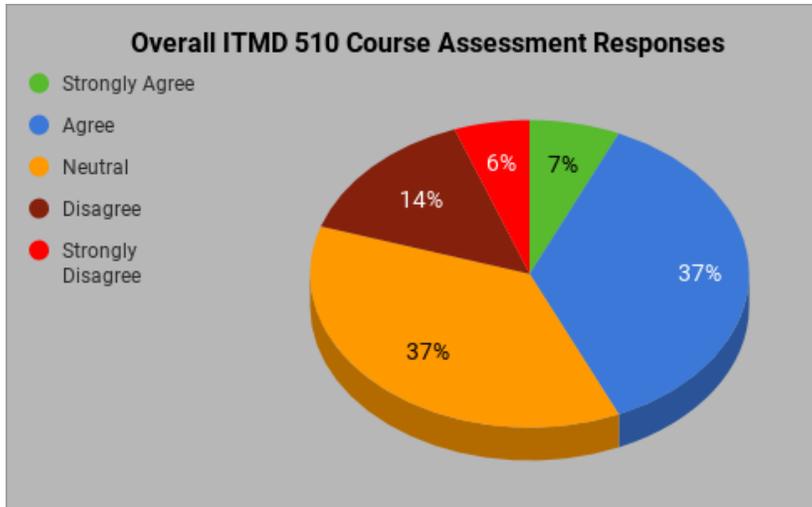
Instructor: Bill Lidinsky

Fall Enrollment: 26

Assessments collected: 15

**TALLIES: COURSE LEARNING OBJECTIVES**

Scale: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree



**Overall Class Ranking**  
**3.24**

**\*Program Education Objective**

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Left blank	AVG
<b>Q1 This course gave me an in-depth understanding of network security and cryptography.</b>	13%	53%	20%	7%	7%	0%	3.60
<b>71% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q2 I feel confident that I can function in an entry or intermediate level security position.</b>	0%	53%	33%	7%	7%	0%	3.33
<b>53% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q3 This course has helped me to begin to prepare to acquire a Security+, SSCP, or other similar certification.</b>	7%	27%	33%	27%	7%	0%	3.00
<b>34% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q4 I have gained practical experience in the development of a security system.</b>	0%	27%	47%	20%	7%	0%	2.93
<b>27% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q5 I have significantly increased my knowledge in the specific facet of security associated with my team project.</b>	13%	47%	27%	13%	0%	0%	3.60
<b>60% of students strongly agreed or agreed that they achieved this outcome.</b>							
<b>Q6* I am able to technically secure enterprise information assets and resources to deter, detect and prevent the success of attacks and intrusions.</b>	7%	13%	60%	13%	7%	0%	3.00
<b>20% of students strongly agreed or agreed that they achieved this outcome.</b>							

## ITM Undergraduate Student Artifact Assessment Fall 2017

Three courses were evaluated by three to five faculty members. Results of the assessment are presented in the *Fall 2017 Student Artifact Assessment (Responses)* which follows. Each evaluator reviewed between seven and ten student artifacts in the form of course assignments or projects. They ranked the attainment of two outcomes on a scale of 1-5, indicating the level at which a student or project team was able to demonstrate attainment of each outcome. This scale was **1 Unable**, **2 Marginally able**, **3 Somewhat able**, **4 Reasonably able**, and **5 Fully able**. This was designed to specifically equate to the 1-5 scale used in the survey questions as to outcome attainment. The questionnaire measuring the outcomes for each course also follows. Only one questionnaire item is shown, but on the actual questionnaire completed by the evaluators, the number of items equated to the number of student items presented for evaluation.

Specific amplifying information regarding the evaluation of each course follows:

### ITM 301

The assignment assessed was in the form of a semester-long student blog which clearly demonstrated through their writing the attainment of the two ITM student outcomes evaluated in their assessment:

Bachelor of Information Technology and Management graduates should be able to:

- (e) Recall and discuss professional, ethical, legal, security and social issues and responsibilities
- (h) Recognize the need for and engage in continuing professional development

One example of blog entries for one student through the term, appropriately anonymized, is included.

### ITM 311

The assignment assessed was a typical homework assignment for the course which allowed students to demonstrate their understanding of computing, program logic, and coding in the Java programming language. The two outcomes evaluated in this assessment include:

Bachelor of Information Technology and Management graduates should be able to:

- (a) Apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline

As the second ITM student outcome assessed in this course did not lend itself to evaluation through the evaluation of homework assignments, the following ITM 311 course outcome was assessed to ensure consistency of the two-question assessment form from course to course:

The student should be able to write, compile, execute and troubleshoot Java programming.

One example of the homework assignment evaluated, appropriately anonymized, is included.

**ITMM 471**

The assignment assessed was a team project plan completed in Microsoft Project. The goal of the assignment was to present a complete plan for a project team to produce a video or an instructional Powerpoint presentation. The ITM student outcomes evaluated in this assessment include:

Bachelor of Information Technology and Management graduates should be able to:

- (d) Function effectively on teams to accomplish a common goal
- (n) Assist in the creation of an effective project plan

Project files are complex and do not lend themselves well to print output, but a brief excerpt from one example of the Project project is included.

## Fall 2017 Student Artifact Assessment (Responses)

## ITM 301 Fall 2017

## Outcome and Item Number Assessed

Timestamp	Email Address	(e) 1	(h) 1	(e) 2	(h) 2	(e) 3	(h) 3	(e) 4	(h) 4	(e) 5	(h) 5	(e) 6	(h) 6	(e) 7	(h) 7	(e) 8	(h) 8	(e) 9	(h) 9	(e) 10	(h) 10
5/27/2018 13:42:32	kpapadem@iit.edu	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5/27/2018 17:11:30	lpapadem@iit.edu	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5/27/2018 17:28:55	jpapadem@iit.edu	5	5	5	5	5	5	4	4	4	5	5	5	5	5	4	4	5	4	4	3
5/28/2018 21:34:35	hajek@iit.edu	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Average for this outcome for this student		5	5	5	5	5	5	4.75	4.75	4.75	5	5	5	5	5	4.75	4.75	5	4.75	4.75	4.5

	Av.	Med	Min	Max
<b>Total</b>	4.89	5.00	4.50	5.00
<b>Outcome (e)</b>	4.90	5.00	4.75	5.00
<b>Outcome (h)</b>	4.88	5.00	4.50	5.00

Faculty Comments: Well constructed assignment and easy to assess, in fact I ended up reading some of the articles posted

Outcome (e) This student appears to be \_\_\_\_\_ to recall and discuss professional, ethical, legal, security and social issues and responsibilities

Outcome (h) This student appears to be \_\_\_\_\_ to recognize the need for and engage in continuing professional development

## ITM 311 Fall 2017

## Outcome and Item Number Assessed

Timestamp	Email Address	(a) 1	4 - 1	(a) 2	4 - 2	(a) 3	4 - 3	(a) 4	4 - 4	(a) 5	4 - 5	(a) 6	4 - 6	(a) 7	4 - 7	(a) 8	4 - 8	(a) 9	4 - 9
5/27/2018 10:50:44	kpapadem@iit.edu	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5/27/2018 17:25:43	lpapadem@iit.edu	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5/27/2018 17:33:28	jpapadem@iit.edu	5	5	4	5	5	5	4	4	4	4	4	5	5	5	5	4	5	4
5/28/2018 12:29:04	wslater@iit.edu	5	3	5	5	5	5	5	5	3	5	5	5	5	5	5	3	5	5
5/28/2018 21:50:29	hajek@iit.edu	5	4	5	5	4	4	5	5	4	4	5	5	5	5	5	5	5	5
Average for this outcome for this student		5	4.4	4.8	5	4.8	4.8	4.8	4.8	4.6	4.2	4.8	5	5	5	5	4.4	5	4.8

	Av.	Med	Min	Max
<b>Total</b>	4.79	4.80	4.20	5.00
<b>Outcome (a)</b>	4.87	4.80	4.60	5.00
<b>Course outcome 4</b>	4.71	4.80	4.20	5.00

Faculty Comments: What Course Text did Katherine use? I have taught this course at IIT. Looks like she is getting GREAT results with her students. Hats off to Katherine!

Good application of Math/Logic, being a professor, I caught a few student typos, but those were errors (2 == instead of 1 =) that students would have caught--not conceptual errors.

Outcome (a) This student appears to be \_\_\_\_\_ apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline

Course outcome 4 This student appears to be \_\_\_\_\_ to write, compile, execute and troubleshoot Java programming

## ITMM 471 Fall 2017

## Outcome and Item Number Assessed

Timestamp	Email Address	(d) 1	(n) 1	(d) 2	(n) 2	(d) 3	(n) 3	(d) 4	(n) 4	(d) 5	(n) 5	(d) 6	(n) 6	(d) 7	(n) 7
5/27/2018 13:34:43	kpapadem@iit.edu	5	5	5	5	5	5	5	5	4	4	5	4	5	4
5/27/2018 21:07:17	lpapadem@iit.edu	5	5	4	4	5	5	5	5	4	5	4	5	5	5
5/27/2018 21:15:17	jpapadem@iit.edu	5	4	5	5	5	5	5	5	5	5	5	5	5	5
Average for this outcome for this team		5.00	4.67	4.67	4.67	5.00	5.00	5.00	5.00	4.33	4.67	4.67	4.67	5.00	4.67

	Av.	Med	Min	Max
<b>Total</b>	4.79	4.67	4.33	5.00
<b>Outcome (d)</b>	4.81	5.00	4.33	5.00
<b>Outcome (n)</b>	4.76	4.67	4.67	5.00

Outcome (d) These students appear to be \_\_\_\_\_ to function effectively on a team to accomplish a common goal

Outcome (n) These students appear to be \_\_\_\_\_ to assist in the creation of an effective project plan

**Average rank of all outcomes assessed: 4.82**

# ITM 301 Student Artifact Assessment

Please examine all student artifact items in the Google Team Drive ITM Courses > ITM > ITM 301 > Assessment directory and complete the assessment section for each item. We suggest opening the Assessment directory in a separate browser window and placing the two windows side-by-side.

Your email address ([trygstad@iit.edu](mailto:trygstad@iit.edu)) will be recorded when you submit this form. Not **trygstad**?

[Sign out](#)

\* Required

## Item 1

Based on your examination of this item, please rank the student's attainment of the outcome on a scale of one to five.

1 Unable    2 Marginally able    3 Somewhat able    4 Reasonably able    5 Fully able

1. This student appears to be \_\_\_\_\_ to recall and discuss professional, ethical, legal, security and social issues and responsibilities \*

*Mark only one oval.*

1	2	3	4	5	
Unable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fully able

2. This student appears to be \_\_\_\_\_ to recognize the need for and engage in continuing professional development \*

*Mark only one oval.*

1	2	3	4	5	
Unable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fully able

## Submit

Thank you for your effort on behalf of our continuous improvement process!

3. We would welcome any comments or observations:

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## ITM301- Current Topics & Discussion, Class Blog

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The required weekly class blog worth 100 points and at a 20% weight of the semester grade, nicely covers all 3 outcomes requested.

16 weeks x 24 students = (theoretical maximum) 384 entries. Sample submitted is 10 students with their weekly submissions for the semester.

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**BLOG**: All students are required to submit a BLOG entry via Blackboard, once a week, beginning on Sunday @ 12:00AM to Saturday @ 11:59PM, from the first week of class to the last one (not including the school posted finals week) on any current topic involving IT, IT technology, IT security, IT inventions, IT academia etc. At the beginning of class, I will pick topics and they will be discussed by the student which posted it for 1 to 2 minutes, followed up by questions or discussion contributions by other students in class.

**\*\*This is not optional and you can't "make up" by posting more than one topic in a week. The Blog is the easiest 100 points you can receive in the class. Not doing it can easily drop you 2 letter grades even if all other work is submitted and you score full points**

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- Objective 3: Apply current technical and mathematical concepts and practices in the core information technologies and recognize the need to engage in continuing professional development.
  - Outcome (e): BITM graduates should be able to recall and discuss professional, ethical, legal, security and social issues and responsibilities
  - Outcome (h): BITM graduates should be able to recognize the need for and engage in continuing professional development
  - Outcome (l): BITM graduates should be able to effectively integrate IT-based solutions into the user environments

Theoretically, all outcomes are reached, but (e) & (h) are the 2 that are most realized.

The Blog assignment and verbal discussion aspect of it, promotes and emphasizes critical thinking alongside communication skills. Each student "teaches" one another, that the IT industry is always evolving, hence retraining and continued education is required.

Furthermore, it places students in the atmosphere and mindset to critically think, then be able to verbally discuss current day legal and especially ethical real life scenarios (which tend to change from semester to semester).

Finally, the Blog assignment is designed to motivate the student, so they will further research on topics that have raised their interest, that they have never encountered before or didn't know much about.

## Microsoft Wants To Make AI Faster Than AI, Launches New “Brainwave” Hardware

Posted by <name removed> at Saturday, August 26, 2017 8:00:03 PM

Last Edited: Saturday, August 26, 2017 8:01:43 PM

Project Brainwave is a new platform that Microsoft has been working on to process information the moment it hits the cloud. It will process the information instantly using a newly made AI that can process and keep an eye on latency all at once. It uses Intel technology that can turn out information with only one millisecond of latency and has been used in other complex AIs like GRUs, It is new technology that combines Dual Processing Unit speed and high performance with the flexibility of something called FPGAs, the technology at work.

The hardware supports Microsoft's Tensorflow and Cognitive Toolkit and is expected to help Microsoft make the jump to cloud services using the Azure Cloud services, something that has a good user base behind it. This gives Microsoft a leg up because their technology can work as hard as a TPU, something that Google already uses as it's own cloud service. No benchmark results have been given at this time. Microsoft has been meaning to make the move to cloud services for a long time, so the ability for them to have their cloud service to be faster and give models is something that is very exciting, especially since they are against a huge company like Google that is already well established in the field of cloud services.

<https://fossbytes.com/microsoft-project-brainwave-real-time-ai-cloud/>

### The Virtual Reality Game Gathering Data for Dementia Researchers

Posted by <name removed> at Wednesday, August 30, 2017 9:46:54 AM

A new game called Sea Hero Quest VR, based on the app for Iphone, tracks and records data for dementia and Alzheimer's researchers to use. As people play, data gets sent about where they go to, and how long they look at things with the optional data being age and gender. 47 million people have dementia and Alzheimer's worldwide with the number supposed to rise steadily until 2050, using this game can help researchers in the US, Germany and the UK figure out what the early warning signs of Dementia are, and make better suited cognitive tests to fight it. VR is still a very new piece of technology, so it's interesting to see it get used in multiple ways like this. Data suggests that memory and cognitive skills peak at 19 and then decline over time, with many people from 15-20 having symptoms that they do not even know about, data that would of been impossible to gather without Sea Hero Quest. It's a game that is fun and helping you all at the same time without you even realizing it.

[https://www.bloomberg.com/news/articles/2017-08-29/the-virtual-reality-game-gathering-data-for-dementia-researchers?utm\\_content=tech&utm\\_campaign=socialflow-organic&utm\\_source=twitter&utm\\_medium=social&cmpid%3D=socialflow-twitter-tech](https://www.bloomberg.com/news/articles/2017-08-29/the-virtual-reality-game-gathering-data-for-dementia-researchers?utm_content=tech&utm_campaign=socialflow-organic&utm_source=twitter&utm_medium=social&cmpid%3D=socialflow-twitter-tech)

Major US carriers say they're working on a more secure two-factor system Click for more options  
Posted by <name removed> at Saturday, September 9, 2017 5:48:29 PM  
Verzion, AT&T, T-Mobile and Sprint, the majority of phone service carriers in the US, say that they are working on a better, safer two-factor identification system to help protect it's users. While they haven't figured out a way to replace the traditional text-message verification system yet, all the companies did say that they would have a solution in the next year or so. Two-Factor identification has been an option for a while, always in a standard text message, which is a hassle for people who can't have both their physical phone on them, and their computer.

The issue with the current method of two factor is that it is getting increasingly easier for hackers to get into it, so the major carriers want to change that to something that has a more secure and certified way to see if the person behind the account is the one actually trying to log in or perform an action. The companies are open to help from other sources like 3rd party developers, and the decision will slowly move the companies in particular away from security issues brought up because of faulty Two-Step verification.

<https://www.theverge.com/2017/9/8/16276398/wireless-carrier-mobile-authentication-system-project-announced>

Apple, Not Google Or Facebook, Will Define The Future Of Augmented Reality [Click for more options](#)

Posted by <name removed> at Saturday, September 16, 2017 9:28:32 PM

Apple is set to give developers the chance to make their own AR applications with ARkit, one of the newer features coming with Iphone 8, Iphone 8 Plus and Iphone X. Built to work on the newly announced IOS 11, this kit allows developers and businesses to make applications with AR features in ways they haven't before. It also allows you to use those applications without the specially designed headset that would of had to have been used otherwise, and has been used in applications like games and housing placement apps made by IKEA.

While it can easily detect horizontal surfaces like floors and desks, it cannot see anything vertical, which is a feature that may be added in the future. The inside of the phone has Apple's newest chip - the A11 Bionic - their very first custom GPU, which helps makes things like ARkit and the newest Animojis possible. The ARkit puts Apple high above it's competitors as the best platform for hardware and software needed to make AR applications, a big step forward in Apple's quest for the best smartphone available.

<https://www.forbes.com/sites/aarontilley/2017/09/12/apple-not-google-or-facebook-will-define-the-future-of-augmented-reality/#54ec462c5ea6>

Data From 540,000 GPS Vehicle Trackers Leaked Online [Click for more options](#)  
Posted by <name removed> at Saturday, September 23, 2017 8:43:24 PM

Kromtech reported yesterday that they discovered a leak concerning slightly more than half a million vehicles and their GPS/Navigation systems. The leak included the email/password hash combinations used to access the vehicles registered with GPS systems, IMEI (International Mobile Equipment identity numbers - given to devices that can get cellular connectivity, license plate numbers, VIN numbers and even where the devices were installed physically in the cars. The tracker in question was not named but is used in at least 400 car dealerships, and log files also exposed give data that is anywhere from the work done on cars to pictures. Kromtech said that this leak happened because the Amazon S3 bucket (think DropBox) was not properly secured. Many of the micro storage areas have caused headaches before and Amazon is aware of the leak and the issues involved with their micro storage.

This is particularly bad because it allows people easier access to information about certain cars in question, and exposes just about everyone with that certain tracker involved. It also helps the people who are trying to steal cars because depending on which car they steal, they already have the information in hand. If anyone who used this certain tracker also uses their email/password hash for anything else beyond their car registrations, they would lose the information on their accounts too, and possibly lose their home address and more to people who are tech-savvy enough to figure it out using previously inaccessible accounts.

Just because it is only GPS data doesn't mean you shouldn't worry.

<https://www.forbes.com/sites/leemathews/2017/09/22/data-from-540000-vehicle-tracking-devices-leaked-online/#6720b42f274b>

NASA Delays Launch of Webb Space Telescope Click for more options

Posted by <name removed> at Saturday, September 30, 2017 10:50:51 PM

The successor to the Hubble Space Telescope is being massively delayed from its original date of sometime in October, to sometime in March or June in next year. This telescope is supposed to replace the aging and in need of repairs Hubble Telescope, which has been in space for quite sometime now. The new telescope, with a budget of 8.7 billion, is just "taking longer than expected," to get certain crucial space elements integrated. No change in budget is projected, and the plan is to have this new telescope be NASA's, ESA (European Space Agency) and the Canadian Space Agency's main space observatory once it is up in the air. New features with the telescope include the ability to see in both infrared and visible light, as well as the ability to see farther into space than Hubble, which makes the delay all the more worrying. The telescope has been in the works since 1996, and is named after James E. Webb, the second Director of NASA, with ties to the Apollo Program.

<http://fortune.com/2017/09/29/nasa-delays-webb-space-telescope/>

Russian hackers used Kaspersky software to find vulnerable NSA docs, says report [Click for more options](#)

Posted by <name removed> at Saturday, October 7, 2017 8:45:55 PM

After a breach of NSA highly classified materials that only happened when a worker transferred everything to his home computer, in 2015, which broke all protocol, we are finally figuring out what got stolen. Files taken from Russian agents include how the US defends against cyberattacks and how the US slips into foreign computer networks. Kaspersky anti-virus was what alerted the hackers of the materials, an anti-virus program much like Norton Security, but no one really knows if the company was aware of the materials, or how it will affect their already bad standing on US soil. On the NSA side of things, multiple people have been charged for Russian hacking events like the election, and the person who took home the content was charged with taking home the content in the first place. All of this hurts both the organizations, particularly the NSA because consistent breaches, like these have been occurring since Snowden, and the fact that Kaspersky's servers may have been in Russia - all antivirus companies send data back to their servers, as is custom - may have possibly increase tensions on the US/Russia relations front.

<https://www.theverge.com/2017/10/5/16431564/kaspersky-russian-hackers-nsa-document-breach>

Comment

Branson's Virgin Group invests in Hyperloop One [Click for more options](#)

Posted by <name removed> at Saturday, October 14, 2017 11:41:15 PM

Branson's Virgin investment group, part of Virgin Mobile, recently invested a sizable amount of money in a project called Hyperloop One. The amount of stake in the project is undisclosed but it can be assumed to be a lot, as it includes re-branding on Virgin's part and adding their founder, Sir Richard Branson, to the firm's board. The project is attempting to make pod based travel an option, and has already had one prototype in the Nevada desert reach speeds of 192mph. Their goal is to have the fully functional system reach speeds of 650mph, and to bring this option of transportation to places as far as the Middle East and India. It uses magnetic levitation which is probably most seen in Japanese bullet trains, and electric propulsion, things that the United States have not seen in terms of transportation. This rivals Elon Musk, who stated that he wanted to make his own system, among other companies. The technology is proven, and has potential in the United States to go commercial, especially with Virgin and how much they have done with technology like cruise liners and the like. Despite this, the technology itself has a long way to go before we could see it in our daily lives.

<http://www.bbc.com/news/technology-41595297>

New Mirai-Like Malware Targets IoT Devices [Click for more options](#)

Posted by <name removed> at Saturday, October 21, 2017 10:50:49 PM

Reaper, a new malware program has the ability to launch multiple DDos attacks against IoT devices, or Internet of Things devices, including but not limited to: DVRs, routers and webcams. The malware has been a source of questioning for security experts, including those who work for Check Point and Qihoo 360, security firms who have found Reaper attempting to effect atleast 2 milltion devices. Reaper attacks devices that have little to no cyber security and as of recent, has no way to be currently destroyed, Reaper is actually made up of a malware called Mirai, which the former has actually ripped source code from, when it was revealed on a hacker forum last year, and makes use of known and unknown issues in software that the public has information on. The items already affected have been said not have launched any DDos attacks of their own, and devices that have noted issues that Reaper may target include products from Netgear, D-Link, and Linksys, among others.

<https://www.pcmag.com/news/356926/new-mirai-like-malware-targets-iot-devices>

Is AR eyewear ready for consumers? Are consumers ready for AR eyewear? Click for more options  
Posted by <name removed> at Saturday, October 28, 2017 10:31:18 PM

AR, the smaller, younger cousin to VR, might be getting a step up into consumers hands, in the form of glasses. AR most recently was announced as part of Google ARCore, and Apple's ARKit, one of the thing's unveiled with the Iphone X and 8. VR is already very established in the form of headsets and games, but beyond SnapChat and Pokemon GO, AR hasn't really gone anywhere, and certainly not into people's hands like AR glasses would. Many reasons why glasses have yet to be introduced, but soon will be is time, money and function. While companies have been slowly making the jump on AR headsets and glasses, it's a process that takes a great deal of time, and a great deal of money, most say that they would be comfortable with the price if it was under a thousand dollars, for example. The headsets made for AR now are bulky and heavy, much how like VR headsets started, and battery life tends to be an issue. Fixes in those key areas could drastically increase the sales later down the line, as it is, many games have not been made for AR in mind, but multiple companies have opened up to allow people to make AR apps, so a year or so down the line there will be apps to use the headset with.

The headsets could be done and in consumer's hands in anywhere from 2-5 years.

<https://techcrunch.com/2017/10/28/is-ar-eyewear-ready-for-consumers-are-consumers-ready-for-ar/>

iPhone X teardown finds major changes inside the gleaming exterior [Click for more options](#)

Posted by <name removed> at Saturday, November 4, 2017 9:03:48 PM

Iphone X actually has major changes, not just on the outside, but on the inside aswell. A couple of engineers took the new Iphone X and decided to crack it open to find out what exactly made Apple's biggest redesign ever so big. What they found was a couple of firsts, including splitting the usual one battery into two different parts, while making it slightly different than the usual rectangle. The Lightning Port is more reinforced than before, with extra space and structure, which is personally great to see as many break their cords. The front facing camera is like something out of the Wii or Xbox with their movement capabilities, the logic board also seems to be something new, as it is smaller than even the Iphone 8, the engineers said. It is actually double sided which is something i've never seen, as they haven't really either. By making it double sided, in actuality two different, packed but thin logic boards, it saves a drastic amount of space, up to 30 percent, and allowing even more components than the previous logic boards, the issue there would really be trying to fix it if something went wrong with the board.

All of this is the guts of the Iphone X, while still keeping the same great features and shape of it's predecessor.

[https://techcrunch.com/2017/11/03/iphone-x-teardown-finds-major-changes-inside-the-  
gleaming-exterior/](https://techcrunch.com/2017/11/03/iphone-x-teardown-finds-major-changes-inside-the-gleaming-exterior/)

Tech companies are cheering on a bill that guts internet protections [Click for more options](#)

Posted by <name removed> at Saturday, November 11, 2017 7:35:28 PM

Last Edited: Saturday, November 11, 2017 7:36:06 PM

2 days ago, a Senate committee approved a bill called the Stop Enabling Sex Trafficking Act, or SESTA, which helps clear the way for a more important vote down the line, many tech policy organizations and some anti-trafficking groups are attempting to protest, with the amount of senators on board, it seems to have a good shot at passing. While Google and Facebook are on board to try and not have to face a harsher regulation, the bill strips at the ability to make and allow user generated content. This wouldn't be such an issue for the larger companies who can handle making changes to accommodate the fact that ANY user generated content would be a legal risk.

That's right, any. The bill when introduced late last summer was called overly broad by certain politicians, and what originally became a bill that stripped the rights of users to not be prosecuted about crimes on their websites are now becoming the fact that anyone could be prosecuted about what they have made, not just content made specifically with facilitating sex trafficking in mind. This was fixed but the bill itself is still flawed, and now with it getting so close to actual law status, people will have to begin to ban content before people see it, which could be make or break for small companies and what they can do to support themselves. With so many giant tech companies putting their support behind this bill, it could spell immense trouble for startups, where innovation truly lies.

<https://www.theverge.com/2017/11/10/16633054/sesta-facebook-google-sex-trafficking-section-230>

Pentagon exposed some of its data on Amazon server [Click for more options](#)

Posted by <name removed> at Saturday, November 18, 2017 8:55:54 PM

The Pentagon, home to parts of the United States that are supposed to be the most secure, apparently aren't. Starting in at least mid-September of this year, data from the Pentagon, home of the United States Military via Homeland Security, had been leaked onto Amazon's very private servers for all to see. The information in question was all stored on the cloud, and while not under any sensitive or confidential briefings, was information that many who had an Amazon Services account shouldn't of been seeing. All information was under public domain, and included bits and pieces skimmed from social media or known, very accessible websites, and accounts for 1.8 billion posts, and goes back as far as 2009, which is now under control by Center Command and Pacific Command. The breach was found in mid-September and patched up by October 1st, which made people question just how safe the cloud was, particularly if Amazon's servers, which are very private and can only be accessed from someone on the inside of the company, could have leaked all of this information to the public.

<http://money.cnn.com/2017/11/17/technology/centcom-data-exposed/index.html>

The Justice Department's AT&T–Time Warner merger lawsuit, explained [Click for more options](#)  
Posted by <name removed> at Saturday, November 25, 2017 9:01:28 AM

The historic almost merger of two big data companies, AT&T and Time Warner, has ground to a halt after the Justice Department once again puts a wrench in the plans for both companies to become entertainment powerhouses. The Justice Department says that, among other things involved in their lawsuit, that the dissolving of possible entertainment companies for mergers with another is unlawful, particularly because it offers one less choice for consumers, and gives one or so companies too much power. They could raise costs substantially on TV packages and Internet, and force their hand with smaller companies who want the same channels or access. AT&T has stated that the Justice Department had let deals like these happen with very little intervention, and says that this deal would increase competition in an already competitive market. Trump's comments have included how the merger in it's entirety should be blocked, particularly because of a few properties, but AT&T refuses to make a deal with those properties gone.

Other deals that have passed that are like AT&T are Comcast and NBC, which did not come without it's own string of regulations, some of which end in the coming year. It's possible that other media giants like Sony or Microsoft may do the same, increasing demand and improving technology, but only time and the end of this lawsuit may tell.

<https://www.theverge.com/2017/11/21/16687396/justice-department-att-time-warner-lawsuit>

Australia had 1.2 million Uber users affected by the company's data hack Click for more options

Posted by <name removed> at Saturday, December 2, 2017 11:27:00 PM

I know, Australia, what does that have to do with us? If the data hacks keep going at the rate they are, everything. Uber's semi-secret data breach hit 57 million people and accounts globally, but this is the very first time we're hearing about the fact it's hitting specific areas or markets. Uber confirmed these numbers, which is in actuality, an approximation, because in their words "The app doesn't always record country code." After this breach, it really might want to, but luckily for Uber, they're cooperating for regulators and reporters. Luckily for all the consumers, there is no evidence from outside forensics teams that anything of importance like social security, trip history, credit card numbers or your entire bank account were taken in the breach, emails, names and phone numbers were taken from someone outside the Uber company through. So far, Uber has stated that they are monitoring accounts and have flagged them for additional fraud protection, whether or not customer trust is gained back is yet to be seen.

For comparison: quoted numbers for the UK seem to be stable at 2.7 million people and accounts affected, at least double that of it's southern Commonwealth country.

<http://mashable.com/2017/12/01/uber-data-breach-australia/#DeM4NqyFMkqs>

# ITM 311 Student Artifact Assessment

Please examine all student artifact items in the Google Team Drive ITM Courses > ITM > ITM 311 > Assessment directory and complete the assessment section for each item. We suggest opening the Assessment directory in a separate browser window and placing the two windows side-by-side.

Your email address ([trygstad@iit.edu](mailto:trygstad@iit.edu)) will be recorded when you submit this form. Not **trygstad**?

[Sign out](#)

\* Required

## Item 1

Based on your examination of this item, please rank the student's attainment of the outcome on a scale of one to five.

1 Unable    2 Marginally able    3 Somewhat able    4 Reasonably able    5 Fully able

1. This student appears to be \_\_\_\_\_ apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline \*

*Mark only one oval.*

1	2	3	4	5	
Unable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fully able

2. This student appears to be \_\_\_\_\_ to write, compile, execute and troubleshoot Java programming \*

*Mark only one oval.*

1	2	3	4	5	
Unable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fully able

## Submit

Thank you for your effort on behalf of our continuous improvement process!

3. We would welcome any comments or observations:

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# ITM 311 *Introduction to Software Development* HW 5

Student Name <removed> Section \_\_\_\_\_

Instructor *Katherine Papademas* Due Date \_\_\_\_\_

Part	1	2	3	4	Total
<i>Maximum Points</i>	25 points	25 points	25 points	25 points	100 points
<i>Your Score</i>					

## Textbook Reading Assignment

Thoroughly read Chapter(s) 7 in your **Java: An Introduction to Computing** textbook.

### Part 1 Glossary Terms

Define, in detail, each of these glossary terms from the realm of computer programming logic and design and computer topics, in general. If applicable, use examples to support your definitions. Consult your notes or course textbook(s) as references or the Internet by visiting Web sites such as:

<http://www.askjeeves.com> or <http://www.webopedia.com>

**(a) case**

Used in switch-case condition operation.  
When the variable being switched on is equal to a case, the statements following that case will execute

**(b) default**

The default case can be used for performing a task when none of the cases is true.

**(c) if Statement**

The part of an if...else statement that executes when the evaluated Boolean expression is true.

**(d) if...then...else Statement**

When the evaluated Boolean expression in **if** is false, it passes to **else** statement and perform the task inside **else**.

**(e) switch Statement**

Used in switch-case condition operation.  
A switch statement allows a variable to be tested for equality against a list of values.

### Part 2 Textbook Exercises - Java Language Basics

For each of the following, circle (a) if the answer is True, otherwise circle (b) for False.

**(1)** Given the statement at right, if  $p$  is 6, then  $q$  becomes 4. `if (p == 6) q = 4;`

(a) True (b) False

**(2)** Given the statement at right, if  $q$  is 6, then  $p$  becomes 4. `if (p == 4) q = 6;`

(a) True (b) False

**(3)** Given the statement at right, if  $p$  is 6, then  $q$  becomes 4. `if (p != 6) q = 4;`

(a) True (b) False

**(4)** Given the statement at right, if  $q$  is 7, then  $p$  becomes 4. `if (q != 6) p = 4;`

<b>ITM 311</b> <i>Introduction to Software Development</i>	<b>HW 5</b>
--	-------------

Student Name <removed> Section \_\_\_\_\_

(a) True (b) False

(5) Given the statement at right, if  $q$  is 4, then  $q$  becomes 4. `if (q >= 6) q = 4;`

(a) True (b) False

### Part 3 Programming Exercises - Java Language Basics

(1) ( **DeMorgan's Principles** )

According to DeMorgan's Logic Principles, if  $p$  and  $q$  are logic statements, then:

(i) `!(p && q)` is equivalent to `!p || !q`

and

(ii) `!(p || q)` is equivalent to `!p && !q`

Use DeMorgan's Principles to rewrite each of the following:

(a) `!(!p || !q)` (b) `(!p || !q) && !q`

a/ `p&&q`

b/ `!(p&&q||q)=>!p`

(2) Write an `if` statement to determine if the Boolean variable named `check1` is currently set to `True`. If it is, set the value of the Boolean variable `check2` to `False`. Otherwise, set it to `True`.

```
if (check1 == true)
{
    check2 = false;
}
else
{
    check2 = true;
}
```

(3) Write an `if` statement that determines whether the variable `balance` is greater than 400.00. If it is, multiply the variable `balance` by 1.06. Otherwise, multiply `balance` by 1.05.

```
if (balance > 400.00)
{
    balance *= 1.06;
}
else
{
    balance *= 1.05;
}
```

**ITM 311** *Introduction to Software Development***HW 5**Student Name <removed>

Section \_\_\_\_\_

- (4) Assuming that an employee's years of service is stored in the Integer variable `intYears`, write an `if` statement that will set the value of the Boolean variable `blnAward` to `True`, if the employee's years of service is greater than 25 and less than 35. Otherwise, set the value of the Boolean variable to `False`.

```
if(intYears>25 && intYears<35)
{
    blnAward=true;
}
else
{
    blnAward=false;
}
```

- (5) Write a `switch case` statement that tests the value of the integer `intNumber`. If the value of `intNumber` is 0, set the character variable named `chrResult` to "F". If the value of `intNumber` is 1, inclusive, set the String variable named `chrResult` to "P". Add a default case which will set the character variable named `chrResult` to "I".

```
switch(intNumber):
{
    case 0: chrResult='F';break;
    case 1: chrResult='P';break;
    default: chrResult='I';
}
```

**Part 4 Programming Exercises ( Selection Control Structures )**

Write a complete program that prompts the user for a student's status and grade point average ( GPA ) and then determines whether or not the student should be placed on the Dean's list. Assume that a student is placed on the Dean's list when he / she has full - time status and a GPA of at least 3.50 . Part - time students cannot be placed on the Dean's list regardless of their GPA.

Attach your completed source code.

**ITM 311** *Introduction to Software Development***HW 5**

Student Name &lt;removed&gt;

Section \_\_\_\_\_

Source Code:

```

/*
 * ██████████
 * 9/18/2017
 */
import java.util.*;
import java.lang.*;
public class GPACal {

    public static void main(String args[])
    {
        double GPA=0;
        String name="";
        boolean Status=false;
        boolean Dean_list=false;
        Scanner input= new Scanner(System.in);
        System.out.println("Please Enter Student's Name: ");
        name=input.nextLine();
        System.out.println("Please Enter Student's GPA: ");
        GPA=input.nextDouble();
        System.out.println("Is student full-time status? (true or false
: ");
        Status=input.nextBoolean();
        if(Status==true)
        {
            if(GPA>=3.5)
            {
                Dean_list=true;
            }
            else
            {
                Dean_list=false;
            }
        }
        else
        {
            Dean_list=false;
        }
        if(Dean_list==true)
        {
            System.out.println("Student "+name+" has been placed in
Dean's List");
        }
        else
        {
            System.out.println("Student "+name+" is not eligible for
Dean's List");
            if(GPA<3.5)
            {

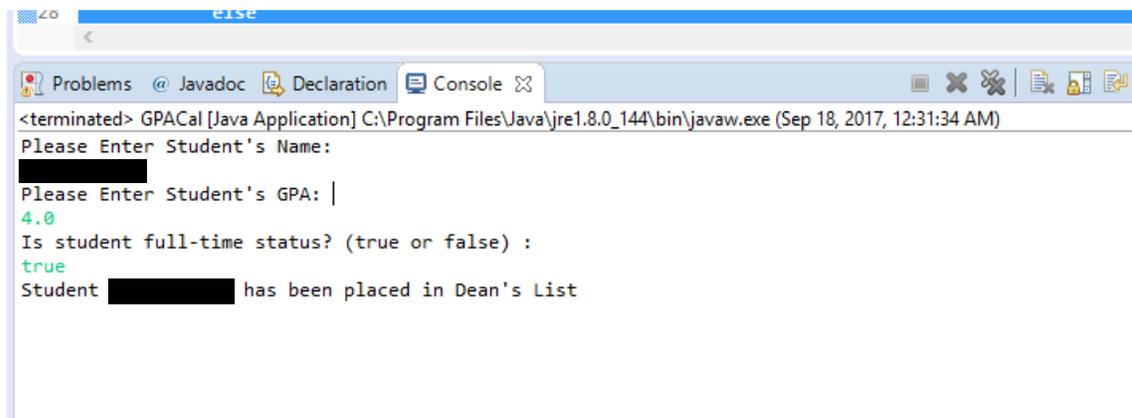
```

**ITM 311** *Introduction to Software Development* **HW 5**

Student Name &lt;removed&gt; Section

```
        System.out.println("Reason: GPA belows 3.50" );
    }
    if(Status==false)
    {
        System.out.println("Reason: Student is not full-time
status." );
    }
}
}
```

Output:



```
<terminated> GPACal [Java Application] C:\Program Files\Java\jre1.8.0_144\bin\javaw.exe (Sep 18, 2017, 12:31:34 AM)
Please Enter Student's Name:
[redacted]
Please Enter Student's GPA: |
4.0
Is student full-time status? (true or false) :
true
Student [redacted] has been placed in Dean's List
```

## ITMM 471 Student Artifact Assessment

Please examine all student artifact items in the Google Team Drive ITM Courses > ITMM > ITMM471 > Assessment directory and complete the assessment section for each item. Because they are Microsoft Project files, you must download the files and you must have have Microsoft Project installed to view the files.

Your email address ([trygstad@iit.edu](mailto:trygstad@iit.edu)) will be recorded when you submit this form. Not trygstad? [Sign out](#)  
 \* Required

### Item 1

Based on your examination of this item, please rank the student team's attainment of the outcome on a scale of one to five.

1 Unable    2 Marginally able    3 Somewhat able    4 Reasonably able    5 Fully able

1. **These students appear to be \_\_\_\_\_ to function effectively on a team to accomplish a common goal \***

*Mark only one oval.*

1	2	3	4	5	
Unable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fully able

2. **These students appear to be \_\_\_\_\_ to assist in the creation of an effective project plan \***

*Mark only one oval.*

1	2	3	4	5	
Unable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fully able

### Submit

Thank you for your effort on behalf of our continuous improvement process!  
 (Especially since this one was such an additional hassle...)

3. **We would welcome any comments or observations:**

---



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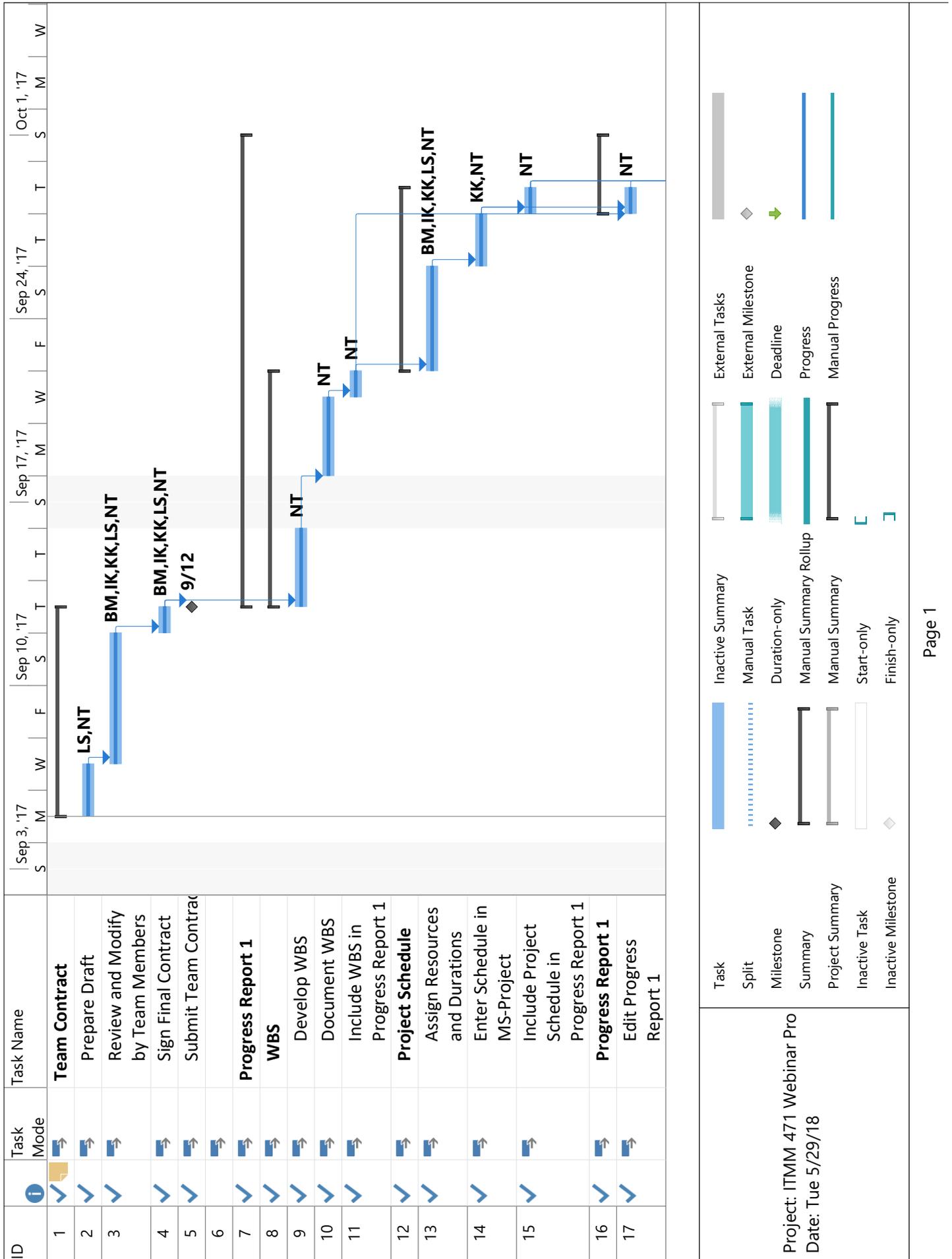
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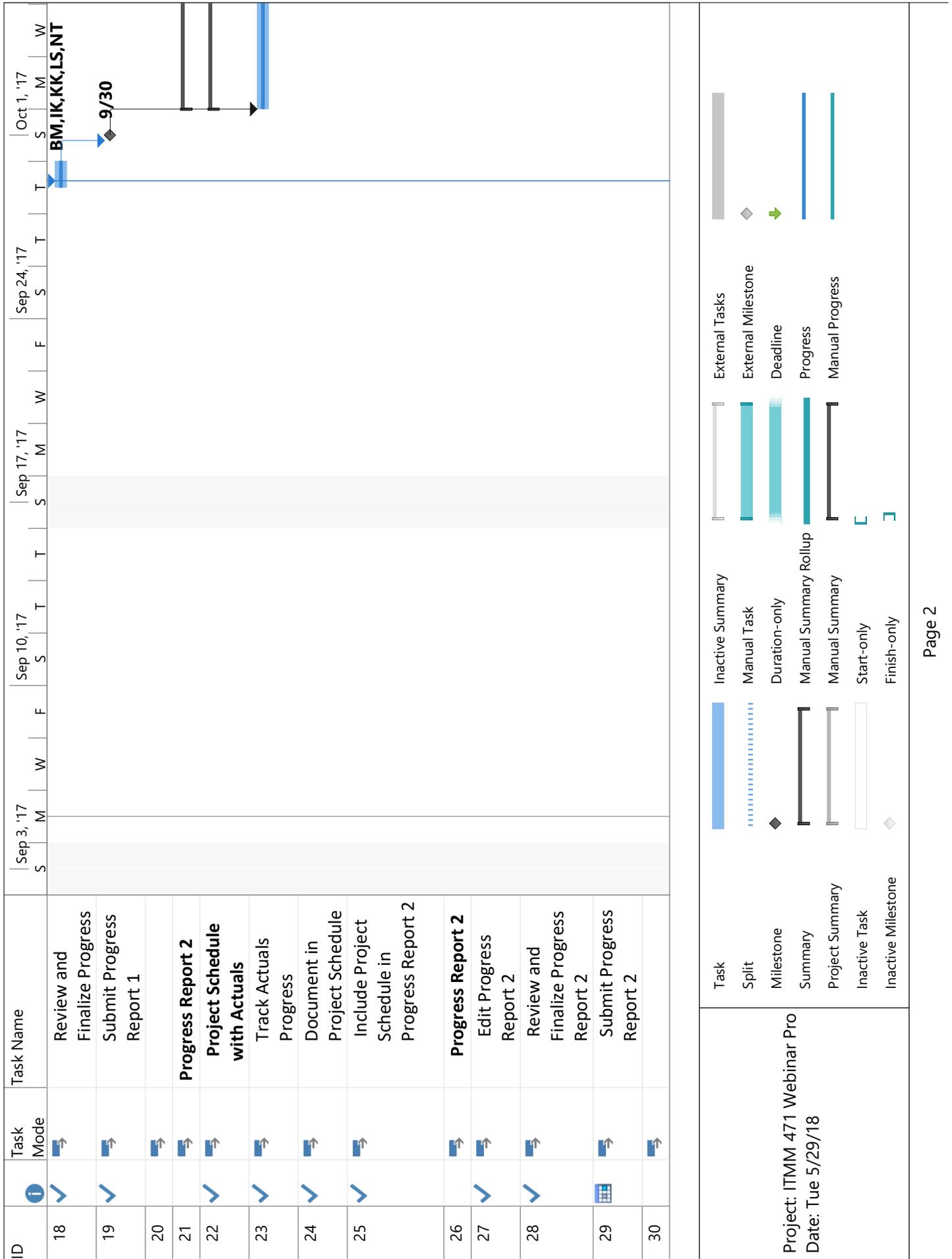


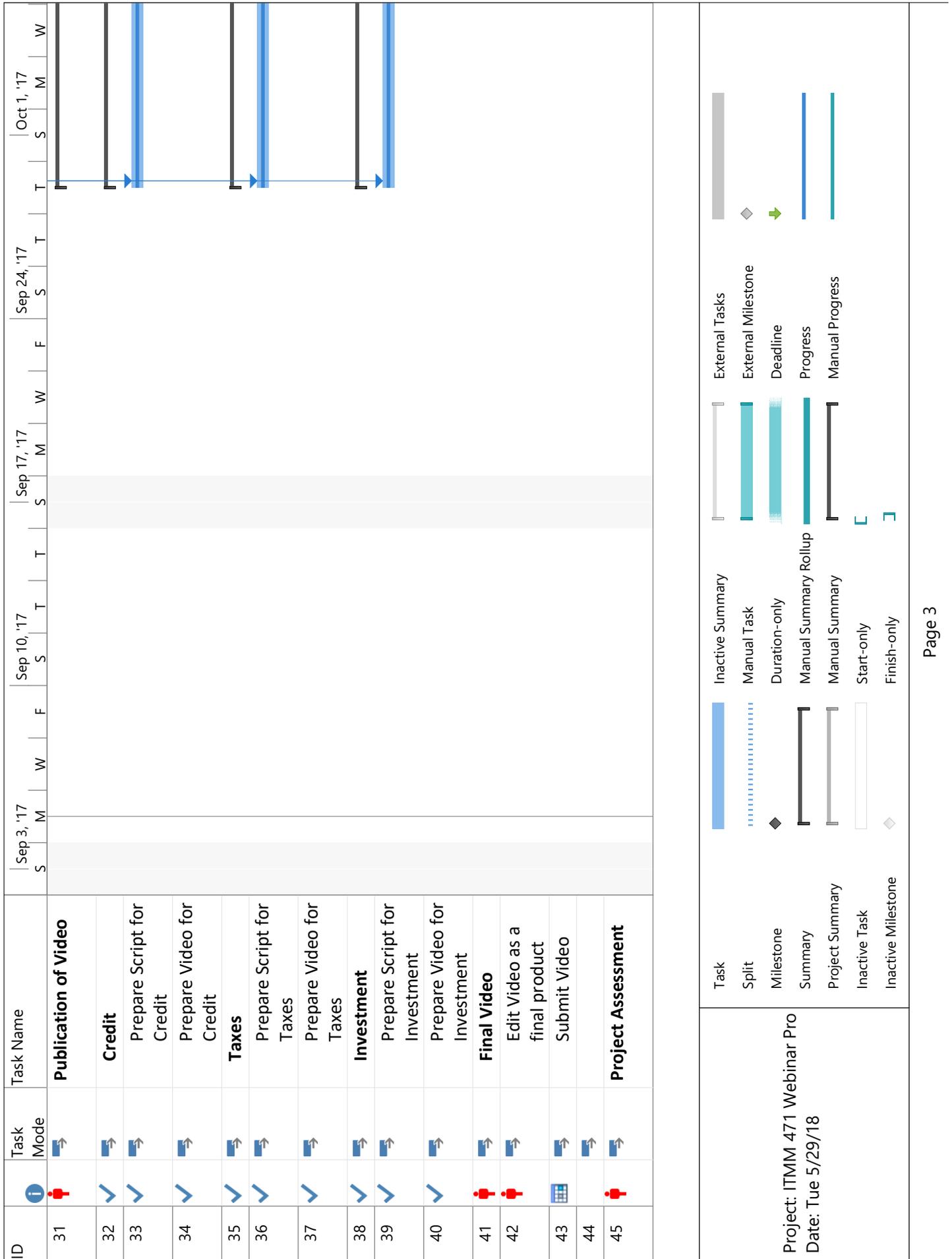
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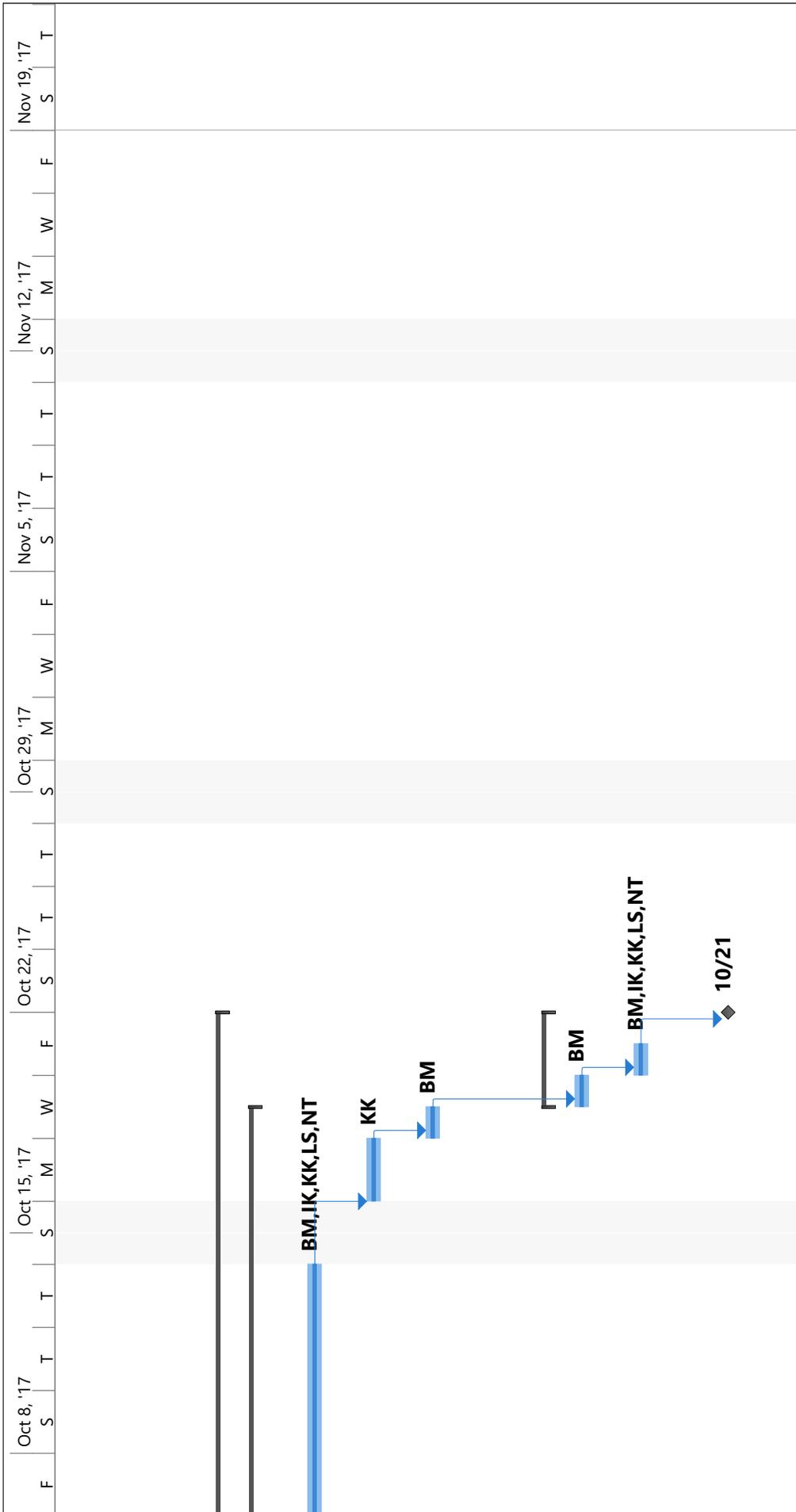
ID	Task Name	Task Mode	Sep 3, '17	Sep 10, '17	Sep 17, '17	Sep 24, '17	Oct 1, '17
46	Prepare Project Assessment						
47	Submit Project Assessment						
48							

<p>Task</p> <p>Split</p> <p>Milestone</p> <p>Summary</p> <p>Project Summary</p> <p>Inactive Task</p> <p>Inactive Milestone</p>	<p>Inactive Summary</p> <p>Manual Task</p> <p>Duration-only</p> <p>Manual Summary Rollup</p> <p>Manual Summary</p> <p>Start-only</p> <p>Finish-only</p>	<p>External Tasks</p> <p>External Milestone</p> <p>Deadline</p> <p>Progress</p> <p>Manual Progress</p>
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Project: ITMM 471 Webinar Pro  
Date: Tue 5/29/18

<p>Oct 8, '17 F S T T T S M M W F S S T T T</p>	<p>Oct 15, '17 S M M W F S S T T T</p>	<p>Oct 22, '17 S M M W F S S T T T</p>	<p>Oct 29, '17 S M M W F S S T T T</p>	<p>Nov 5, '17 S M M W F S S T T T</p>	<p>Nov 12, '17 S M M W F S S T T T</p>	<p>Nov 19, '17 S M M W F S S T T T</p>																																										
<p>Project: ITMM 471 Webinar Pro Date: Tue 5/29/18</p> <table border="0"> <tr> <td>Task</td> <td></td> <td>Inactive Summary</td> <td></td> <td>External Tasks</td> <td></td> </tr> <tr> <td>Split</td> <td></td> <td>Manual Task</td> <td></td> <td>External Milestone</td> <td></td> </tr> <tr> <td>Milestone</td> <td></td> <td>Duration-only</td> <td></td> <td>Deadline</td> <td></td> </tr> <tr> <td>Summary</td> <td></td> <td>Manual Summary Rollup</td> <td></td> <td>Progress</td> <td></td> </tr> <tr> <td>Project Summary</td> <td></td> <td>Manual Summary</td> <td></td> <td>Manual Progress</td> <td></td> </tr> <tr> <td>Inactive Task</td> <td></td> <td>Start-only</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Inactive Milestone</td> <td></td> <td>Finish-only</td> <td></td> <td></td> <td></td> </tr> </table>							Task		Inactive Summary		External Tasks		Split		Manual Task		External Milestone		Milestone		Duration-only		Deadline		Summary		Manual Summary Rollup		Progress		Project Summary		Manual Summary		Manual Progress		Inactive Task		Start-only				Inactive Milestone		Finish-only			
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Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Progress
Project Summary	Manual Summary	Manual Progress
Inactive Task	Start-only	
Inactive Milestone	Finish-only	

Project: ITMM 471 Webinar Pro  
Date: Tue 5/29/18

## Information Technology and Management Assessment Plan Spring 2018

### Undergraduate Assessment, Spring 2018:

Based on *Information Technology and Management Assessment Plan for Undergraduate Degrees, 2016-2018 (Revision 4)* [http://itm.iit.edu/faculty/2016-2018ITMUndergraduateAssessmentPlan\(Rev4\).pdf](http://itm.iit.edu/faculty/2016-2018ITMUndergraduateAssessmentPlan(Rev4).pdf)

Program Educational Objectives Assessed: 1

New Student Outcomes Assessed: (a), (b), (d), (f)

Student Artifacts: Survey / April 2018 / Evaluation by ITM Curriculum Committee

Assignments / May 2018 / Evaluators: Trygstad/Papademas/Zheng

Courses assessed:

<i>Curricular Area</i>	<i>Course</i>
Web Systems and HCI	ITMD 362 Human Computer Interaction and Web Design
Information Management	ITMD 421 Data Modeling and Applications
Systems Integration/Architecture	ITMT 430 System Integration

The following program education objective will be evaluated:

1. Problem solve and create innovative answers to provide technology solutions for the problems of business, industry, government, non-profit organizations, and individuals.

The following BITM Student Outcomes will be evaluated in ITMD 362:

Bachelor of Information Technology and Management graduates should be able to:

- (a) Analyze a problem and identify and define the computing requirements appropriate to its solution
- (b) Design, implement, and evaluate a computer-based solution to meet a given set of computing requirements
- (f) Identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems

The following BITM Student Outcomes will be evaluated in ITMD 421:

Bachelor of Information Technology and Management graduates should be able to:

- (a) Analyze a problem and identify and define the computing requirements appropriate to its solution
- (b) Design, implement, and evaluate a computer-based solution to meet a given set of computing requirements
- (d) Make informed judgments in computing practice based on legal and ethical principles

The following BITM Student Outcomes will be evaluated in ITMT 430:

Bachelor of Information Technology and Management graduates should be able to:

- (b) Design, implement, and evaluate a computer-based solution to meet a given set of computing requirements
- (d) Make informed judgments in computing practice based on legal and ethical principles
- (f) Identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems

In addition to the above, course objectives for each course will be assessed.

### Graduate Assessment, Spring 2018:

Based on *Information Technology and Management Assessment Plan for Graduate Degrees, 2016-2018 (Revision 1)* [http://itm.iit.edu/faculty/2016-2018ITMGraduateProgramAssessmentPlan\(Rev.1\).pdf](http://itm.iit.edu/faculty/2016-2018ITMGraduateProgramAssessmentPlan(Rev.1).pdf)

Master of Information Technology and Management (MITM) Program Educational Objectives Assessed: 2

Master of Cyber Forensics and Security (MCYF) Program Educational Objectives Assessed: 2

Student Artifacts: Survey / April 2018 / Evaluation by ITM Curriculum Committee

Assignments / May 2018 / Evaluators: Trygstad/Papademas/Zheng

Courses assessed:

<b>Curricular Area</b>	<b>Course</b>	
Software Development (MITM)	ITMT 593	Embedded Systems
Security Technologies (MCYF)	ITMS 549	Cyber Security Technologies: Projects & Advanced Methods

The following program education objective will be evaluated in ITMD 593:

2. Work with, lead, and manage teams in an enterprise environment to collaboratively arrive at optimal technology solutions.

The following program education objective will be evaluated in ITMS 549:

3. Technically secure enterprise information assets and resources to deter, detect, and prevent the success of attacks and intrusions.

In addition to the above, course objectives for each course will be assessed.

**Survey drafting and data collection staff:**

Amber Chatellier, ITM Department Manager  
Angela Jarka, ITM Assistant Department Coordinator

**Assessment Evaluators:**

*ITM Curriculum Committee*

The Curriculum Committee evaluates Survey Artifacts and makes recommendations based on evaluations of all assessment artifacts. All full-time faculty members are voting members of the committee should they elect to participate.

Chair: Ray Trygstad, ITM Associate Chair and Industry Professor

Members: Jeremy Hajek, Industry Associate Professor  
Louis F. McHugh IV, SAT Computer Systems Manager and Adjunct Industry Associate Professor  
Thomas "T.J." Johnson, Adjunct Industry Professor  
Sheik "Sam" Shamsuddin, Adjunct Industry Professor; College of DuPage Professor and Computer Information System Program Coordinator

Faculty: C. Robert Carlson, ITM Chair and Professor  
Karl Stolley, Associate Professor (joint appointment)  
Adarsh Arora, Coleman Entrepreneur-in-Residence and Industry Professor  
William Lidinsky, Interim Director, Center for Cyber Security and Forensics Education and Industry Professor  
James Pappademas, Industry Professor  
Yong Zheng, Senior Lecturer

All full-time faculty members may be appointed as assessment evaluators for Assignment Artifacts. Assessment Evaluators for Spring 2018 are:

Ray Trygstad  
James Papademas  
Yong Zheng