Memorandum

To: Chair, Undergraduate Curriculum Committee
From: M. Gallo

Through: V. Dunbar
Through: D. Wilt

Subject: Grade Change Basis for QEP Courses AVT 3999–4002

September 14, 2012

Attached are “Changing Restrictions or Credits in A Course” forms for AVT 3999, AVT 4000, AVT 4001, and AVT 4002. These courses are research-oriented courses designed expressly for the QEP. Given the nature of these courses, a more appropriate grading scheme is P/F instead of the current A, B, C, D, F.

To facilitate the P/F grading scheme, the attached scoring rubric will be used to assess students in these courses. A score of 1 will correspond to F, and a score of 2 or 3 will correspond to P. Please let me know if I need to furnish any additional information with respect to this matter.
The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

**REQUEST IS FOR CHANGE IN COURSE**

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>399</td>
</tr>
</tbody>
</table>

Planning Aviation Research

**Course Title**

**Course**

TO BE INCLUDED IN 2013 CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR Spring 2013 TERM

Effective term must be a future term for which registration has not begun. Catalog year will be the next printed edition. Earlier terms/years will not be processed.

**IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE?**

- [ ] Yes
- [x] No

If yes, current credits ___________ requested credits ___________

**IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE?**

- [ ] Add
- [ ] Remove
- [ ] Prerequisite
- [ ] Corequisite

Prefix Number

Prefix Number

Prefix Number

- [ ] Add
- [x] Remove
- [ ] Prerequisite
- [ ] Corequisite

Prefix Number

- [ ] Add
- [ ] Remove
- [ ] Prerequisite
- [ ] Corequisite

Prefix Number

- [ ] Add
- [ ] Remove
- [ ] Other Restrictions

- [ ] Yes
- [ ] No

If yes, please check all that apply:

If yes, please list below:

*Other restrictions may include changing the grades applied to the course (P,V,S,H, A-F, CR/DR), majors or class levels restricted from registration, or other restrictions.

**Change grading basis from A, B, C, D, F to P/F.**

**APPROVALS:** Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1) **Originator**

   [Signature]

   9/14/12

2) **Department Head/Program Chair**

   [Signature]

   9/18/12

3) **Dean or Associate Dean**

   [Signature]

   9/18/12

4) **Chair, Graduate Council**

   [Signature]

   Date

**OR**

**Chair, Undergraduate Curriculum Committee**

   [Signature]

   Date

**CATALOG DIRECTOR'S USE ONLY**

<table>
<thead>
<tr>
<th>SCourse</th>
<th>SCAD126</th>
<th>SCAPREQ</th>
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<table>
<thead>
<tr>
<th>SCABASE</th>
<th>SCARIES</th>
<th>Operator Initials</th>
<th>Date</th>
</tr>
</thead>
</table>

**DISTRIBUTION**

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Copy - Academic Unit
The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

REQUEST IS FOR CHANGE IN COURSE A V T 4 0 0 0 Conducting Aviation Research

TO BE INCLUDED IN 20_13_14_CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR Spring 2013 TERM

Effective term must be a future term for which registration has not begun. Catalog year will be the next printed edition. Earlier terms/years will not be processed.

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE?     □ Yes     ☒ No     If yes, current credits requested credits

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE?     □ Yes     ☒ No     If yes, please check all that apply:

☐ Add    ☐ Remove    ☐ Prerequisite    ☐ Corequisite

☐ Add    ☐ Remove    ☐ Prerequisite    ☐ Corequisite

☐ Add    ☐ Remove    ☐ Prerequisite    ☐ Corequisite

☐ Add    ☐ Remove    ☒ Other Restrictions*    ☒ Yes    ☐ No     If yes, please list below:

*Other restrictions may include changing the grades applied to the course (P/F, S/N, A-F, CEU), majors or class levels restricted from registration, or other restrictions.

Change grading basis from A, B, C, D, F to P/F.

APPROVALS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1)  Michael A. Callen  9/14/12
    Originator    Date

2)  Victoria Fournier  9/14/12
    Department Head/Program Chair    Date

3)  [Signature]  9/18/12
    Dean or Associate Dean    Date

4)  Chair, Graduate Council    Date

Chair, Undergraduate Curriculum Committee    Date

CATALOG DIRECTOR'S USE ONLY

SCACOURSE ___________________________ SCADEREQ ___________________________

SCABASE ___________________________ SCABRES ___________________________ Operator Initials ___________________________ Date _____________

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CHANGING RESTRICTIONS
OR CREDITS IN A COURSE

The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

COLLEGE: Aeronautics
DEPARTMENT: N/A

REQUEST IS FOR CHANGE IN COURSE: A V T 4 0 0 1  Reporting Aviation Research

Prefix: Number: Course Title

TO BE INCLUDED IN 20 1 8 20 14 CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR Spring 2013 TERM

Effective term must be a future term for which registration has not begun. Catalog year will be the next printed edition. Earlier terms/years will not be processed.

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE? □ Yes X No
If yes, current credits __________ requested credits __________

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE? □ Yes □ No
If yes, please check all that apply:

□ Add □ Remove □ Prerequisite □ Corequisite
Prefix: Number: Prefix: Number: Prefix: Number
□ and □ or

□ Add □ Remove □ Prerequisite □ Corequisite
Prefix: Number: Prefix: Number: Prefix: Number
□ and □ or

□ Add □ Remove □ Other Restrictions* □ Yes □ No
If yes, please list below:
*Other restrictions may include changing the grades applied to the course (P/F, S/U, A-F), CEU, majors or class levels restricted from registration, or other restrictions.

Change grading basis from A, B, C, D, F to P/F.

__________________________

APPROVALS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1) Michael A. Cullo 9/14/12
Originator Date

2) Victoria A. R. 9/14/12
Department Head/Program Chair Date

3) 9-18-12
Dean or Associate Dean Date

4) Chair, Graduate Council Date

Chair, Undergraduate Curriculum Committee Date

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SCACRGSE SCADETL SCAPREQ

SCABASE SCARRES Operator Initials Date

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Florida Institute of Technology

CHANGING RESTRICTIONS OR CREDITS IN A COURSE

The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

COLLEGE: Aeronautics
DEPARTMENT: N/A

REQUEST IS FOR CHANGE IN COURSE: AVT 4002 Aviation Research

TO BE INCLUDED IN 20 13/20 14 CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR Spring 2013 TERM

Effective term must be a future term for which registration has not begun. Catalog year will be the next printed edition. Earlier terms/years will not be processed.

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE? □ Yes ☑ No  ☑ if yes, current credits requested credits

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE? □ Yes ☑ No  ☑ if yes, please check all that apply:

☐ Add  ☐ Remove  ☐ Prerequisite  ☐ Corequisite

☐ Add  ☐ Remove  ☐ Prerequisite  ☐ Corequisite

☐ Add  ☐ Remove  ☐ Prerequisite  ☐ Corequisite

☐ Add  ☐ Remove  ☐ Other Restrictions* ☑ Yes ☐ No  ☑ if yes, please list below:

*Other restrictions may include changing the grades applied to the course (P/F, S/U, A-F, CEU), majors or class levels restricted from registration, or other restrictions.

Change grading basis from A, B, C, D, F to P/F.

APPROVALS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1) Michael A. Gallo 9/14/12
   Origantor
   Date

2) Victoria Dumberg 9/14/12
   Department Head/Program Chair
   Date

3) [Signature] 9/18/12
   Dean or Associate Dean
   Date

4) Chair, Graduate Council
   Date

OR

Chair, Undergraduate Curriculum Committee
   Date

CATALOG DIRECTOR’S USE ONLY

SCARSE  SCADTL  SCAPRLO

SCABASE  SCABRES  Operator Initials

Date

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RSG-11711
### Scoring Rubric (AVT 3999 / AVT 4000 / AVT 4001 / AVT 4002)

**College of Aeronautics**  
**Scoring Rubric (AVT 3999 / AVT 4000 / AVT 4001 / AVT 4002)**

<table>
<thead>
<tr>
<th>Outcome (PLO): The student is able to ...</th>
<th>1 Unsatisfactory</th>
<th>2 Satisfactory</th>
<th>3 Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) ... plan aviation research (Problem Solving)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapters 1–3 of Proposal:</td>
<td></td>
<td></td>
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<tr>
<td>— Purpose/Background</td>
<td></td>
<td></td>
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<tr>
<td>— RQs/Hypotheses</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>— Literature review</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>— Research Methodology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Instrumentation Issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Procedures</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>— Internal Validity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Purpose statement and background omitted or inappropriate with respect to study's context.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- RQs limited or trivial, and operational definitions either missing or incomplete.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Literature review narrow in scope, missing key studies, or consists of non-research based articles.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Research methodology inconsistent with RQs.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Instrumentation issues not discussed or incorrectly addressed.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Incomplete procedures; difficult to replicate.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Sources of invalidity missing or inconsistent with design.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Overall organization of proposal is weak, lacks careful thought, and does not clearly align study need/purpose, targeted variables, RQs, and methodology into a clear, coherent, unambiguous, and cohesive structure.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Lacks understanding of the basic concepts, processes, or conventions of the targeted aviation topic.</td>
<td>❑</td>
<td>❑</td>
<td>❑</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2 Unsatisfactory</th>
<th>2 Satisfactory</th>
<th>3 Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) ... conduct aviation research (Logical/Analytical)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapters 4–5 of Final Report:</td>
<td></td>
<td></td>
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<tr>
<td>— Data analyses</td>
<td></td>
<td></td>
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<tr>
<td>— Results</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Conclusions/Inferences</td>
<td></td>
<td></td>
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<tr>
<td>— Implications</td>
<td></td>
<td></td>
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<tr>
<td>— Limitations/Delimitations</td>
<td></td>
<td></td>
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<tr>
<td>— Recommendations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Data flawed, wrong, false, misinterpreted.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Statistical procedures are incorrect.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Analyses wrong, incoherent, inappropriate, or confused; or analyses do not explore all possibilities and misses connections.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Results are unexplained or misinterpreted.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Interpretations unsupported or exaggerated.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Plausible explanations are limited.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Inferences/implications are limited.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Conclusions are predictable; interpretations show little creativity, imagination, or insight.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Uses correct descriptive and inferential statistical procedures.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Demonstrates well-executed research.</td>
<td>❑</td>
<td>❑</td>
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<tr>
<td>- Provides strong, comprehensive, and coherent arguments.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Demonstrates how results are supported by data.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Inferences and implications acceptable but misses opportunities to explore other interesting issues or connections.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Specifies limitations/delimitations but lacks discussion in context of external validity.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Recommendations given only for future research.</td>
<td>❑</td>
<td>❑</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3 Unsatisfactory</th>
<th>3 Satisfactory</th>
<th>3 Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) ... report aviation research (Communication)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation of Final Report:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Oral presentation</td>
<td></td>
<td></td>
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<tr>
<td>— Supporting media</td>
<td></td>
<td></td>
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<tr>
<td>— Response to questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>— Final document</td>
<td></td>
<td></td>
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<tr>
<td>- Unprepared.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Little use of supporting media to communicate content.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Lacks language of research during presentation.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Responses to questions are more opinion-based, and not aligned to literature or data.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Presentation not well organized; rambling.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Final report poorly written; not APA compliant.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Presentation follows a logical organization and is easy to follow.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Patterns, relationships, and themes described as findings are presented coherently.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Most major issues are addressed.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Exhibits command and authority of the study.</td>
<td>❑</td>
<td>❑</td>
</tr>
<tr>
<td>- Final report is acceptable and mostly APA compliant.</td>
<td>❑</td>
<td>❑</td>
</tr>
</tbody>
</table>

- Articulates research problem and need for study clearly with sufficient detail.  
- Links research problem and background to literature, not opinion.  
- Argument for need of the study is focused, logical, and compelling.  
- RQs are clear and reasonable.  
- Operationally defines all key terms/phrases fully and leaves little room for ambiguity.  
- Literature review is comprehensive, well organized, and concludes with a summary of findings, implications, and need for study.  
- Research methodology commensurate with RQs.  
- Attention given to instrumentation validity and reliability.  
- Procedures feasible and described in sufficient detail.  
- Identifies and discusses sources of validity associated with methodology/design thoroughly.  
- Overall proposal demonstrates understanding and mastery of the targeted aviation topic.

**Scoring (fractional scores permitted):** (1) (2) (3) (Please write comments on back of form.)