**PURDUE UNIVERSITY**

**REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE (100-400 LEVEL)**

**DEPARTMENT**: Motorsports Engineering  
**EFFECTIVE SESSION**: Fall 2009

**INSTRUCTIONS**: Please check the items below which describe the purpose of this request.

1. New course with supporting documents  
2. Add existing course offered at another campus  
3. Expiration of a course  
4. Change in course number  
5. Change in course title  
6. Change in course credit type  
7. Change in course attributes (department head signature only)  
8. Change in instructional hours  
9. Change in course description  
10. Change in course requisites  
11. Change in semesters offered (department head signature only)  
12. Transfer from one department to another

**PROPOSED:**

- Subject Abbreviation: MSTE
- Course Number: 272
- Long Title: Introduction to Motorsports
- Short Title: Intro to Motorsports

**EXISTING:**

- Subject Abbreviation:  
- Course Number:  
- Long Title:  
- Short Title:  

**TERMS OFFERED**

- Check All That Apply:  
  - Summer  
  - Fall  
  - Spring

- CAMPUS(ES) INVOLVED:  
  - Calumet  
  - Cont Ed  
  - Tech Statewide  
  - Ft. Wayne  
  - W. Lafayette  
  - Indianapolis

**CREDIT TYPE**

1. Fixed Credit: Cr. Hrs.: 3
2. Variable Credit Range:  
   - Minimum Cr. Hrs:  
   - (Check One):  
     - To  
     - Or  
   - Maximum Cr. Hrs:  
3. Equivalent Credit: Yes  
4. Thesis Credit: Yes

**COURSE ATTRIBUTES**: Check All That Apply

1. Pass/Not Pass Only
2. Satisfactory/Unsatisfactory Only
3. Repeatable
4. Credit by Examination
5. Designator Required
6. Special Fees
7. Registration Approval Type
8. Variable Title
9. Remedial
10. Honors
11. Full Time Privilege
12. Off Campus Experience

**INSTRUCTIONAL TYPE**

- Lecture
- Recitation
- Presentation
- Laboratory
- Lab Prep
- Studio
- Distance
- Clinic
- Experiential
- Research
- Ind. Study
- Pract/Observe

- Minutes Per Week: 75
- Meetings Per Week: 2
- Weeks Offered: 15
- % of Credit Offered:  
- Delivery Method (Asyn, Or Syn.):  
- Delivery Medium (Audio, Internet, Live, Test-Based, Video):  
- Cross-Listed Courses

**COURSE DESCRIPTION (INCLUDE REQUIRITES):**

- None. This course provides an introduction to the Motorsports industry, including careers available, the organization and history of the industry, and technology development that has occurred due to the industry. A student project is required.

**Dates and Signatures**

- Calumet Department Head: Signatures:  
- Calumet School Dean: Date:  
- Fort Wayne Department Head: Signatures:  
- Fort Wayne School Dean: Date:  
- Indianapolis Department Head: Signatures:  
- Indianapolis School Dean: Date:  
- North Central Department Head: Signatures:  
- North Central Chancellor: Date:  
- West Lafayette Department Head: Signatures:  
- West Lafayette College/School Dean: Date:  
- West Lafayette Registrar: Date:  

**OFFICE OF THE REGISTRAR**
New Course Request

Indians University  Indianapolis  Campus

Check Appropriate Boxes: Undergraduate credit  [ ]  Graduate credit  [ ]  Professional credit [ ]

1. School/Division: School of Engineering & Technology  2. Academic Subject Code: MSTE

3. Course Number: 272  4. Instructor: Pete Hylton

5. Course Title: Introduction to Motorsports

Recommended Abbreviation (Optional) (Limited to 32 Characters including spaces)

6. First time this course is to be offered (Semester/Year): Fall 2009

7. Credit Hours: Fixed at 3 or Variable from ________ to ________

8. Is this course to be graded S/E (only)? Yes [ ] No [x]

9. Is variable title approval being requested? Yes [ ] No [x]

10. Course description (not to exceed 50 words) for Bulletin publication:

  P: none. This course provides an introduction to the Motorsports Industry, including careers available, the organization and history of the industry, and technology development that has occurred due to the industry. A student project is required.

11. Lecture Contact Hours: Fixed at 3 or Variable from ________ to ________

12. Non-Lecture Contact Hours: Fixed at ________ or Variable from ________ to ________

13. Estimated enrollment: ________ of which ________ percent are expected to be graduate students.

14. Frequency of scheduling: ________ yearly ________ Will this course be required for majors? ________ yes ________

15. Justification for new course: ________ Part of the already approved BS in Motorsports Engineering ________

16. Are the necessary reading materials currently available in the appropriate library? ________ yes ________

17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.

18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant. May overlap with MET 272. Necessary to allocate credit hours to correct BS Program

19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new course with existing courses or areas of strong concern, with instructors that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions that consulted.

Submitted by: [Signature] Date: 2-17-09

Direcr Chairman/Anion Director Date

Dean of Graduate School (when required) Date

Chancellor/Presidnt Date

University Enrollment Services Date

After School Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UP 724

University Enrollment Services: Final White, Chancellor/President Blue, School Division: Yellow, Department Division Pink, University Enrollment Services: Advance White
MSTE 272 – Introduction to Motorsports (co-listed with MET 272)

Description: An overview of the motorsports industry, organization, technology, and careers.

Class Times: Tuesdays & Thursdays 4:30-5:45

Room: ET304

Instructor: Pete Hylton
Phone: 317-274-7192
Office: ET209G
Email: phylton@iupui.edu

Text: none

Grading:
- Assignments: 100 points
- Project: 100 points
- Final Exam: 100 points

Minimum Scale: 90-100 = A, 80-90 = B, 70-80 = C, 60-70 = D, 0-60 = F +/- will be given

Research Project (individual)

1. Thoroughly research and investigate some motorsports design aspect, OR design and analyze a new motorsports related concept, OR perform further investigation on some topic which was only covered briefly in class OR compare and contrast two or more different aspects or viewpoints of some topic(s) covered in class.
2. Use APA writing format. Feel free to use the university writing center for help.
3. Minimum 10 pages of text, double spaced 12 point font, normal margins. Minimum 5 references (book, magazine, video, internet, interview), must be credible (no bloggers) – check accuracy and authenticity of sources.
4. Minimum 10 minute in-class presentation is required.

Design Project (group)

1. Design projects must involve all aspects of an actual design and fabrication project, including concept evaluation, design considerations, necessary analysis, and project completion.
2. A variety of projects will be considered acceptable. The professor will have some examples to offer, or you may suggest one. Professor must approve the project concept.
3. An appropriate length summary report will be required, including description of all design aspects, and analysis, with appropriate figures and graphics.
4. Minimum 10 minute in-class presentation is required.

All Projects: Minimums are minimums – meeting minimums does not guarantee an A paper.
### Tentative Course Schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Aug 21</td>
<td>Introduction (HW 1, due Sep 2)</td>
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<tr>
<td>Aug 26</td>
<td>Motorsports Industry Overview</td>
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<tr>
<td>Aug 28</td>
<td>History of Motorsports</td>
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<tr>
<td>Aug 29</td>
<td>Optional Field Trip to US Nationals Drag Races at ORP</td>
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<tr>
<td>Sep 2</td>
<td>History of Motorsports, continued (HW 2, due Sep 11)</td>
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<tr>
<td>Sep 4</td>
<td>Guest speaker: Brian Woodall, Physics PhD and motorcycle specialist</td>
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<tr>
<td>Sep 9</td>
<td>Design for Safety</td>
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<tr>
<td>Sep 11</td>
<td>Math and Physics of Racing (HW 3 due Sept 25)</td>
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<tr>
<td>Sep 16</td>
<td>Guest Speaker: Tom Weisenbach, Indiana Motorsports Association</td>
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<tr>
<td>Sep 18</td>
<td>Sanctioning Bodies, Rules Making, Event Organization</td>
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<tr>
<td>Sep 23</td>
<td>Guest Speaker: John Oreovicz, motorsports journalist</td>
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<tr>
<td>Sep 25</td>
<td>Creative Design Approaches</td>
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<tr>
<td>Sep 30</td>
<td>Guest Speaker: Rollie Helmling, former team owner and past-president of USAC</td>
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<tr>
<td>Oct 2</td>
<td>Basic Aerodynamics (HW 4 due Oct 14)</td>
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<td>Oct 7</td>
<td>Guest Speaker: Danny White, crew chief, currently IPS, formerly Indycar</td>
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<tr>
<td>Oct 9</td>
<td>Motorsports Industry Perceptions</td>
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<tr>
<td>Oct 14</td>
<td>Basic Vehicle Dynamics (HW 5 due Oct 23)</td>
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<tr>
<td>Oct 16</td>
<td>Guest Speaker: Ken Joyce, KJ Safety Products</td>
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<tr>
<td>Oct 21</td>
<td>Manufacturing for Motorsports</td>
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<td>Oct 23</td>
<td>Diversity in Motorsports</td>
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<td>Oct 26</td>
<td>Challenge of the Deans at SCCA Autocross, Grissom Aeroplex</td>
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<td>Oct 28</td>
<td>Guest Speaker: tbd</td>
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<tr>
<td>Oct 30</td>
<td>Technical &amp; non-technical careers</td>
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<td>Nov 4</td>
<td>Guest Speaker: tbd</td>
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<tr>
<td>Nov 5</td>
<td>Extra Credit for attending Spirit &amp; Place discussion, 7-9 pm, campus</td>
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<td>Nov 6</td>
<td>Project Presentations</td>
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<tr>
<td>Nov 11</td>
<td>Project Presentations</td>
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<td>Nov 13</td>
<td>Project Presentations</td>
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<td>Nov 18</td>
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<td>Nov 20</td>
<td>Project Presentations</td>
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<td>Nov 25</td>
<td>Project Presentations</td>
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<tr>
<td>Nov 27</td>
<td>THANKSGIVING – No Class</td>
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<tr>
<td>Dec 2</td>
<td>Wrap-up and Review</td>
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<td>Dec 4</td>
<td>No Class (Professor at DIAC)</td>
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<tr>
<td>Dec 12</td>
<td>Final Exam, 3:30-5:30 (may be on-line)</td>
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Course Outcomes:

1. Demonstrate knowledge of the motorsports industry and techniques, skills and modern tools of the industry.
2. Apply current knowledge and adapt to and solve problems relevant to the industry.
3. Communicate effectively.
4. Recognize the need for and posses the ability to pursue lifelong learning
5. Recognize professional, ethical and societal responsibilities
6. Recognize contemporary issues and be aware of and respect diversity.